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NEWS 11 NOV 23 Annual Reload of IFI Databases
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NEWS 15 DEC 02 PCTGEN enhanced with patent family and legal status display data from INPADOCDB
NEWS 16 DEC 02 USGENE: Enhanced coverage of bibliographic and sequence information
NEWS 17 DEC 21 New Indicator Identifies Multiple Basic Patent Records Containing Equivalent Chemical Indexing in CA/CAplus
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L1 STRUCTURE UPLOADED

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=> d 11
L1 HAS NO ANSWERS
L1           STR
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED - 445 TO ITERATE

100.0% PROCESSED 445 ITERATIONS 8 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 7635 TO 10165
PROJECTED ANSWERS: 8 TO 329

L2 8 SEA SSS SAM L1

=> search 11
ENTER TYPE OF SEARCH (SSS), CSS, FAMILY, OR EXACT:.
ENTER SCOPE OF SEARCH (SAMPLE), FULL, RANGE, OR SUBSET:full
FULL SEARCH INITIATED 18:44:04 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 8746 TO ITERATE

100.0% PROCESSED 8746 ITERATIONS 167 ANSWERS
SEARCH TIME: 00.00.01

L3 167 SEA SSS FUL L1

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COST IN U.S. DOLLARS SINCE FILE TOTAL
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FILE LAST UPDATED: 28 Jan 2010 (20100128/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4

31 L3

=> d 14 fbib ab hitstr 1-31

L4 ANSWER 1 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
AN 2009:176608 CAPLUS
DN 150:229659
TI Methods and compositions using peptides and other compounds for derepression of IAP (inhibitor of apoptosis protein)-inhibited caspase, and therapeutic use
IN Reed, John C.; Houghten, Richard A.; Nefzi, Adel; Ostresh, John M.; Pinilla, Clemencia; Welsh, Kate
PA The Burnham Institute, USA
SO U.S. Pat. Appl. Publ., 256pp., Cont.-in-part of U.S. Ser. No. 886m385.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20090043099	A1	20090212	US 2007-982317 WO 2006-US9695 US 2008-886385	20071031 W 20060317 A2 20080822
	WO 2006102068	A2	20060928	WO 2006-US9695	20060317
	WO 2006102068	A3	20090611		
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PATENT FAMILY INFORMATION:

FAN 2006:977385

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20060211627	A1	20060921	US 2005-186629	20050719
	US 7217688	B2	20070515		
	US 20070003535	A1	20070104	US 2005-84714 US 2005-84714	A2 20050317 20050317
	CA 2601653	A1	20060928	CA 2006-2601653 US 2005-84714 US 2005-186629	20060317 A 20050317 A 20050719
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 US 2005-186629 A 20050719
 EP 1865977 A2 20071219 EP 2006-738724 20060317
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 US 2005-186629 A 20050719
 WO 2006-US9695 W 20060317
 JP 2008537735 T 20080925 JP 2008-502089 20060317
 US 2005-84714 A 20050317
 US 2005-186629 A 20050719
 WO 2006-US9695 W 20060317

OS MARPAT 150:229659

AB The invention provides isolated agents having novel chemical structures and possessing superior activity as derepressors of IAP-inhibited caspase. The invention further provides a method of derepressing an IAP-inhibited caspase. The invention further provides assay methods employing labeled compds. of the invention, especially fluorescent labeled compds. An advantage of an agent of the invention is that it can be used to allow apoptosis to occur in a cell where apoptosis is being prevented by the regulatory activity of an IAP. Also provided is a method of treating an individual having a condition characterized by a pathol. reduced level of apoptosis, e.g. cancer or hyperplasia, by administering an agent of the invention, wherein the agent derepresses an IAP-inhibited caspase, thereby increasing the level of apoptosis. Compds. of the invention include both peptides and nonpeptide compds., e.g. polyphenylurea compds.

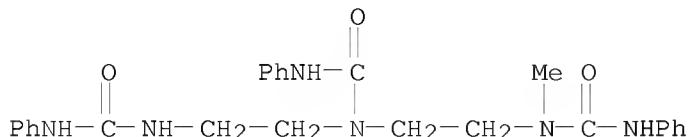
IT 1116141-36-6D, derivs.

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(IAP-inhibited caspase derepressor peptides and other compds., and therapeutic use)

RN 1116141-36-6 CAPLUS

CN Urea, N-[2-[methyl[(phenylamino)carbonyl]amino]ethyl]-N'-phenyl-N-[2-[(phenylamino)carbonyl]amino]ethyl]- (CA INDEX NAME)



L4 ANSWER 2 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2009:82735 CAPLUS

DN 151:221154

TI Synthesis of N-thioureido lariat calix[4]crown and calix[4]arene

tetrathioureido derivatives

AU Zheng, Xiao-Hua; Yang, Fa-Fu; Tang, Fu-Sheng; Yin, Feng-Ju; Yang, Yan-Xin
CS College of Chemistry and Materials, Fujian Normal University, Fuzhou,
350007, Peop. Rep. China

SO Youji Huaxue (2008), 28(12), 2159-2161
CODEN: YCHHDX; ISSN: 0253-2786

PB Youji Huaxue Bianjibu

DT Journal

LA Chinese

AB A method for the synthesis of the title compds. is reported here. Under control of the molar ratio of reactants, a calix[4]-aza-crown ether derivative and a ring-opened aza-calix[4]arene derivative were obtained by a reaction of 2,2'-'-[26,28-dihydroxy-5,11,17,23-tetrakis(tert-butyl)calix[4]arene]bis(oxy)]bis[acetic acid] 1,1'-diethyl ester with N1-(2-aminoethyl)-1,2-ethanediamine. A reaction of the above-mentioned intermediates with Ph isothiocyanate delivered the title compds. (92% and 87% yield, resp.). The structures and conformations of new compds. were characterized by elemental analyses, IR, ESI-MS, ¹H NMR etc.

IT 1072839-60-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of calix[4]arene thiourea derivs.)

RN 1072839-60-1 CAPLUS

CN Acetamide, 2,2'-[15,11,17,23-tetrakis(1,1-dimethylethyl)-26,28-

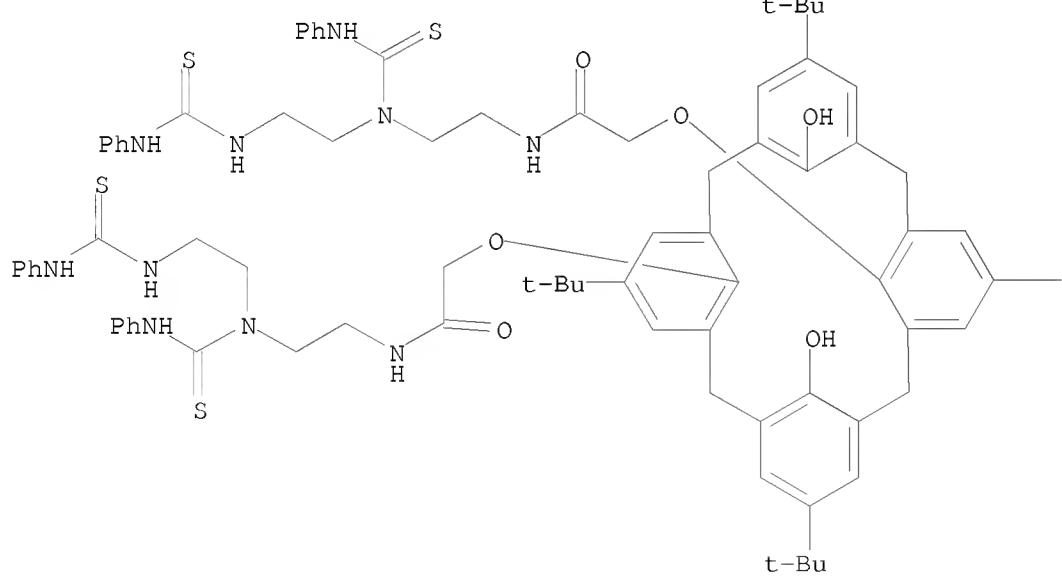
dihydroxypentacyclo[19.3.1.1₃,7.19,13.11₅,19]octacos-1-

1(25), 3, 5, 7(28), 9, 11, 13(27), 15, 17, 19(26), 21, 23-dodecaer-

diyl]bis(oxy)]bis[N-[2-[(phenylamino)thioxomethyl][2-

[[(phenylamino)thioxomethyl]amino]ethyl]amino]ethyl]-

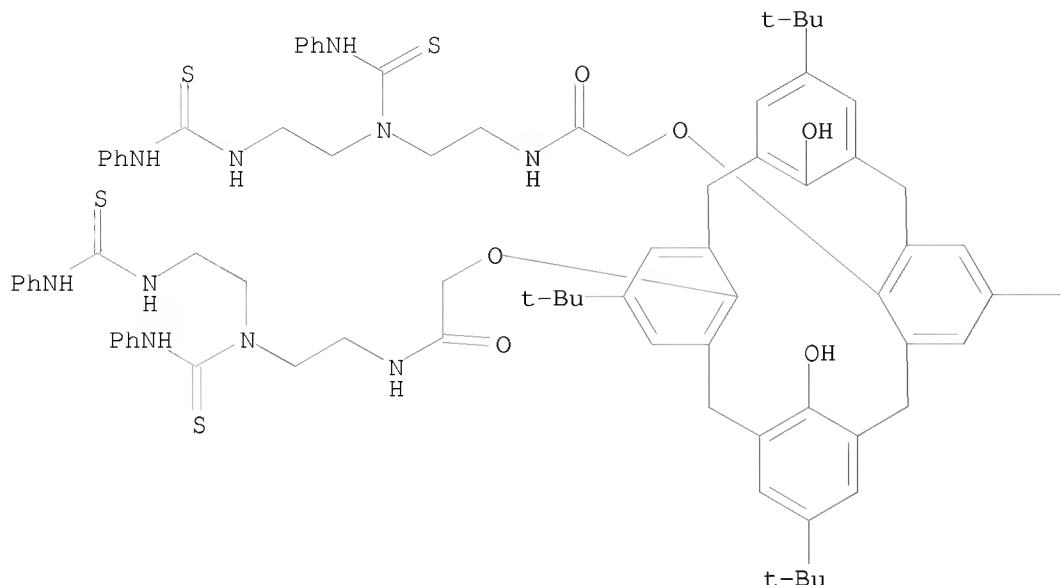
PAGE 1-A



— Bu-t

L4 ANSWER 3 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 2007:1472762 CAPLUS
 DN 149:493360
 TI Synthesis of calix[4]arene-thiourea derivative
 AU Zheng, Xiao-hua; Yang, Fa-fu; Liu, Li-ming; Guo, Yu
 CS College of Chemistry and Materials Science, Fujian Normal University,
 Fuzhou, 350007, Peop. Rep. China
 SO Hecheng Huaxue (2007), 15(5), 597-598
 CODEN: HEHUE2; ISSN: 1005-1511
 PB Hecheng Huaxue Bianjibu
 DT Journal
 LA Chinese
 OS CASREACT 149:493360
 AB The treatment of 2,2'-[[5,11,17,23-tetrakis(1,1-dimethylethyl)-26,28-dihydroxy[calix[4]arene]-25,27-diyl]bis(oxy)]bis[acetic acid] di-Et ester with excess diethylenetriamine gave 2,2'-[[5,11,17,23-tetrakis(1,1-dimethylethyl)-26,28-dihydroxy[calix[4]arene]-25,27-diyl]bis(oxy)]bis[N-[2-(2-aminoethyl)ethyl]acetamide]. Treatment of the latter amide derivative with (isothiocyanato)benzene provided a new calix[4]arene derivative with four thiourea units. The structure was characterized by 1H NMR, IR, MS and elemental anal.
 IT 1072839-60-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of calix[4]arene-thiourea derivative)
 RN 1072839-60-1 CAPLUS
 CN Acetamide, 2,2'-[[5,11,17,23-tetrakis(1,1-dimethylethyl)-26,28-dihydroxypentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-25,27-diyl]bis(oxy)]bis[N-[2-[(phenylamino)thioxomethyl]ethyl]amino]ethyl]- [(phenylamino)thioxomethyl]amino]ethyl]- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

—Bu-t

L4 ANSWER 4 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
AN 2006:38992 CAPLUS
DN 144:292512
TI Solid-Supported Copper Catalysts for Atom-Transfer Radical Cyclizations:
Assessment of Support Type and Ligand Structure on Catalyst Performance in
the Synthesis of Nitrogen Heterocycles
AU Clark, Andrew J.; Geden, Joanna V.; Thom, Stephen
CS Department of Chemistry, University of Warwick, West Midlands, CV4 7AL, UK
SO Journal of Organic Chemistry (2006), 71(4), 1471-1479
CODEN: JOCEAH; ISSN: 0022-3263
PB American Chemical Society
DT Journal
LA English
OS CASREACT 144:292512
AB A range of solid-supported pyridinemethanimine (PMI) and polyamine ligands
were prepared on SiO₂, polystyrene (P), and JandaJel (JJ) supports. The

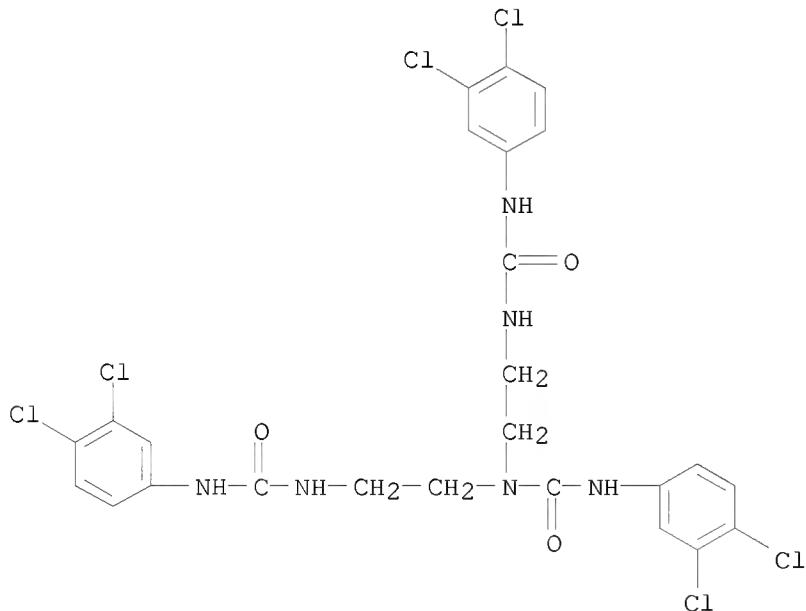
CuCl and CuBr complexes of these supported ligands were used to assess both the effect of the ligand type and the nature of the support upon a representative range of Cu-mediated atom transfer radical cyclizations of 5-exo-trig C13CCON(Ts)CH₂CH:CH₂ (6), BrCMe₂CONTsCH₂CH:CH₂ (24), MeCCl₂CONTsCH₂CH:CH₂ (25), 5-exo-dig Me₂CBrNTsCH₂C.tplbond.CH (26), 4-exo-trig Me₂CBrCONBnC:C(CH₂)₅ (28), and 5-endo-trig derivs. Me₂CBrCON(CH₂Ph)R (R = 1-cyclohexen-1-yl, 27) and MeCHBrCON(CH₂Ph)R (R = 1-cyclohexen-1-yl, 38) to give N-heterocycles. The effect of the nature of the support on the stereochem. outcome of the 5-exo cyclization of 25 was probed. Generally, the type of support (e.g., polystyrene, SiO₂, or JandaJel) had very little effect upon the efficiency and selectivity of the processes, but the nature of the ligand type immobilized was the important factor. Thus, the 5-exo cyclization of 6 and 24–26 proceeded more rapidly with the PMI ligands, whereas 4-exo cyclizations 28 and 5-endo radical polar crossover reactions 27 and 38 proceeded more efficiently with the JJ-TEDETA ligand [Et₂NCH₂CH₂]₂NCH₂CH₂CO₂-JJ (15). The efficiency of the supported ligands was also compared to their solution counterparts. The reusability of P-PMDETA ligand system, Me₂NCH₂CH₂NMeCH₂CH₂NMeCH₂CH₂CH₂-P (13), was assessed in the cyclization of 6.

IT 878408-78-7DP, alkyl-linked polystyrene-supported
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 878408-78-7 CAPLUS

CN Urea, N'-(3,4-dichlorophenyl)-N,N-bis[2-[[[(3,4-dichlorophenyl)amino]carbonyl]amino]ethyl]- (CA INDEX NAME)



OSC.G 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)
RE.CNT 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
AN 2005:823561 CAPLUS
DN 143:229578

TI Preparation of diurea derivatives as inhibitors of the production of pro-inflammatory cytokines, especially interleukin-2 (IL-2)
 IN Abramo, Aina Lisbeth; Pettersson, Lars Olof Goeran; Andersson, Kerstin Ingalill; Sundstedt, Asa Anette
 PA Active Biotech AB, Swed.
 SO PCT Int. Appl., 58 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005074919	A1	20050818	WO 2005-SE54	20050119
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	AU 2005210594	A1	20050818	AU 2005-210594 SE 2004-213 US 2004-541231P	P 20050119 A 20040204 P 20040204
	CA 2551566	A1	20050818	WO 2005-SE54 CA 2005-2551566 SE 2004-213 US 2004-541231P	W 20050119 20050119 A 20040204 P 20040204
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US	20090118330	A1	20090507	US 2006-585054 SE 2004-213 US 2004-541231P	20060721 A 20040204 P 20040204
IN	2006CN02854	A	20070706	WO 2005-SE54 IN 2006-CN2854 SE 2004-213	W 20050119 20060803 A 20040204
				WO 2005-SE54	W 20050119

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS CASREACT 143:229578; MARPAT 143:229578

AB The title compds. I [A = (un)substituted Ph, naphthyl, pyridyl, etc.; R1 = dimethylamino, diethylamino, pyrrolidino, etc.; Y = halo, dimethylamino, methoxy, etc.; Z = O, S; n = 1-3; m = 2-4] that block intracellular signal transduction and thereby inhibit the production of pro-inflammatory cytokines, especially interleukin-2 (IL-2) and/or induce apoptosis in activated T-cells, were prepared. Thus, reacting 1-isocyanato-4-trifluoromethylbenzene with N1-[2-(pyrrolidin-1-yl)ethyl]ethane-1,2-diamine (preparation given) in CH₂C₁₂ afforded 80% 1-[2-(pyrrolidin-1-yl)ethyl]-3-(4-trifluoromethylphenyl)-1-{2-[3-(4-trifluoromethylphenyl)ureido]ethyl}urea which showed IC₅₀ of 3 μM against PMA/Ionomycin stimulated IL-2 production in human T-cells. The invention further discloses such a compound I for use as a medicament, the use of said compound I for the manufacturing of a medicament for the treatment

of immune disorders which benefit from inhibition of production of IL-2 and other pro-inflammatory cytokines and/or induction of apoptosis in activated T-cells, a pharmaceutical composition comprising said compound I and a method of treatment comprising administration of a pharmaceutically effective amount of said compound I.

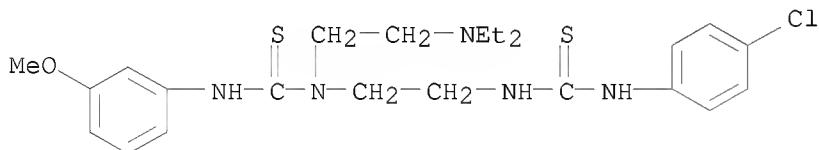
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RL: PRPH (Prophetic)

(Preparation of diurea derivatives as inhibitors of the production of pro-inflammatory cytokines, especially interleukin-2 (IL-2))

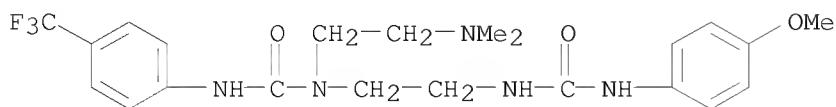
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CN INDEX NAME NOT YET ASSIGNED



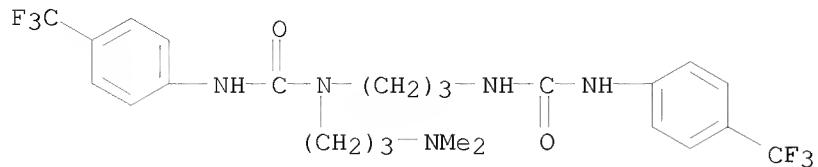
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CN INDEX NAME NOT YET ASSIGNED



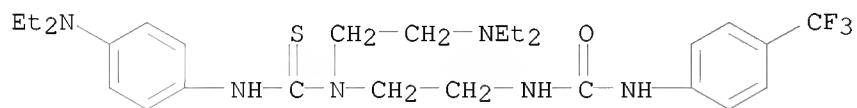
RN 1044678-76-3 CAPLUS

CN INDEX NAME NOT YET ASSIGNED



RN 1044678-87-6 CAPLUS

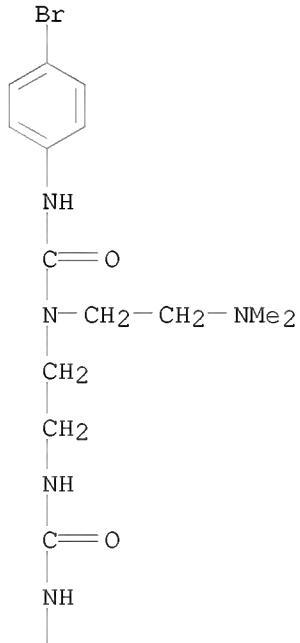
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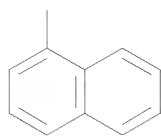
RN 1044678-90-1 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

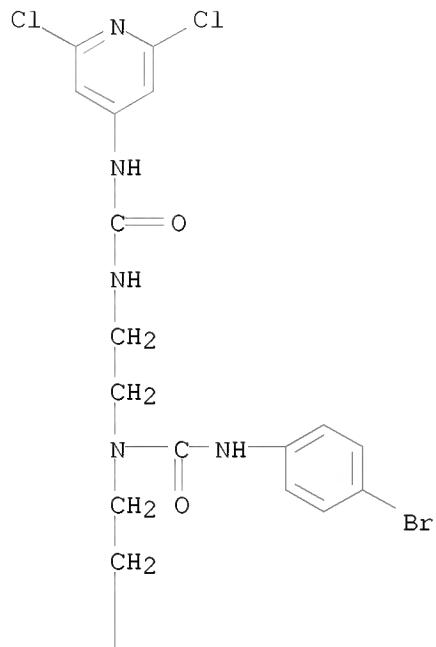


PAGE 2-A

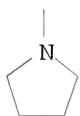


RN 1044678-92-3 CAPLUS
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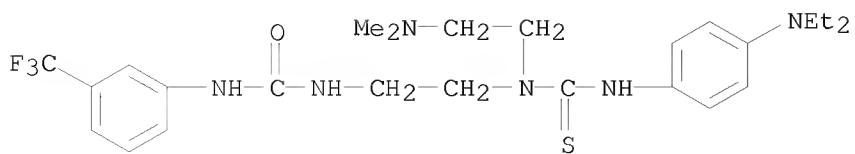
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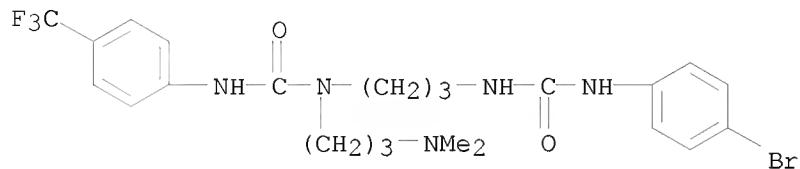
PAGE 2-A



RN 1044678-94-5 CAPLUS
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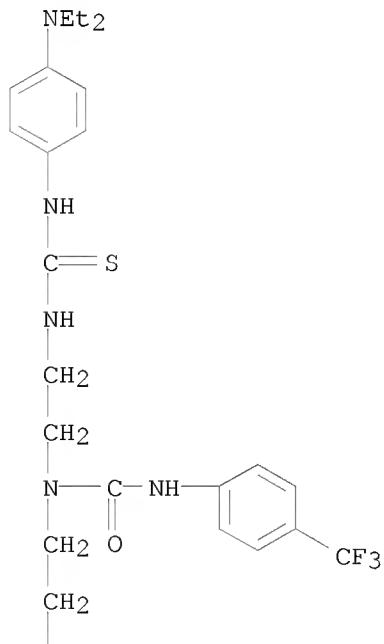


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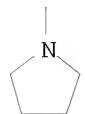


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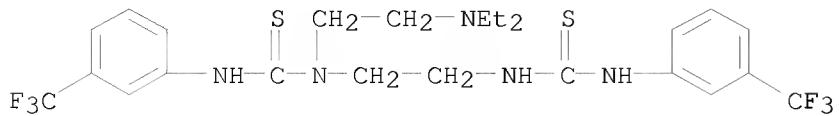
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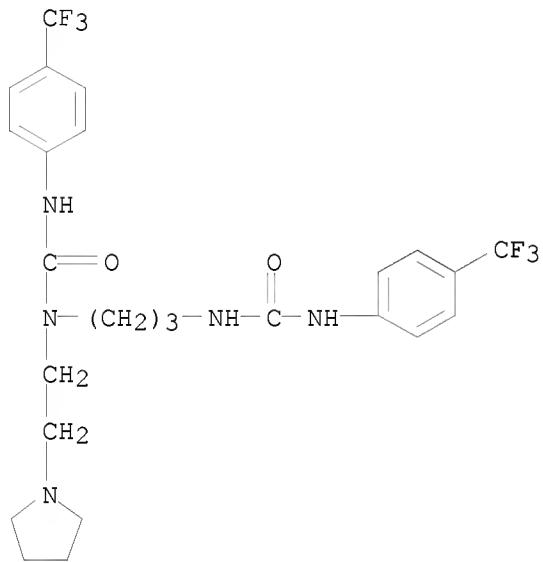
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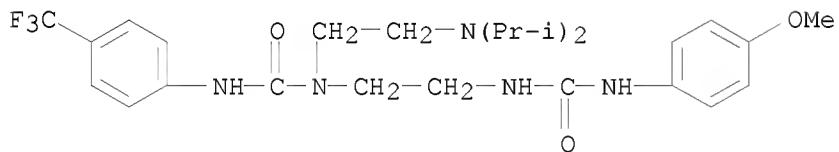
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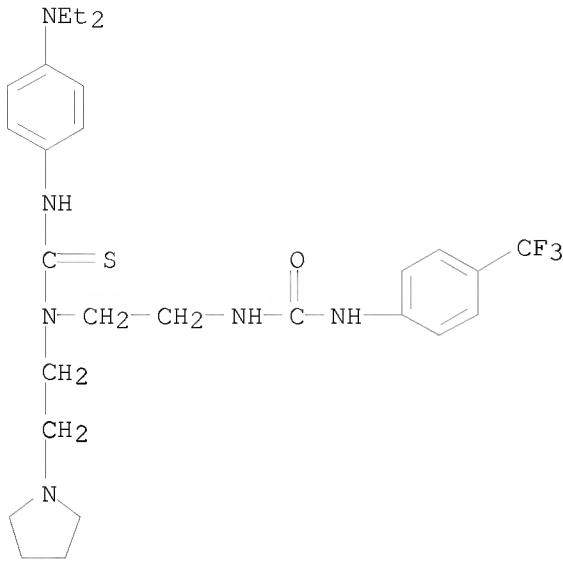
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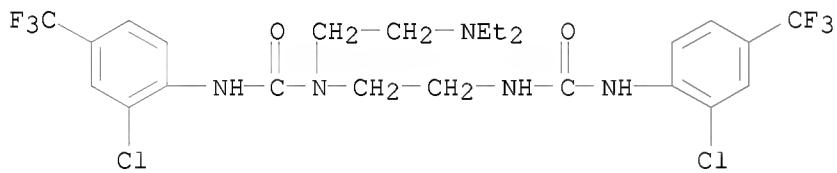
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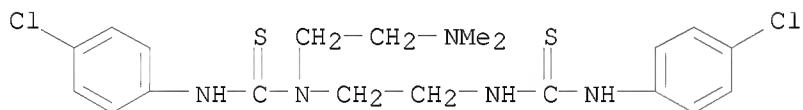
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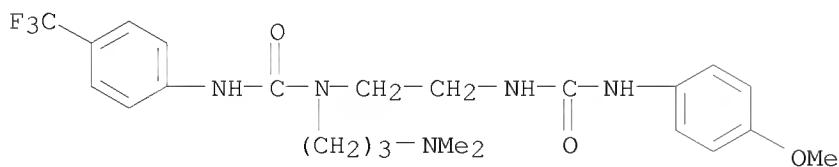
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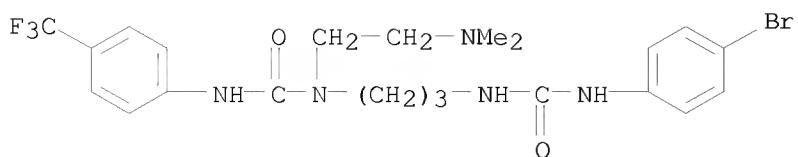
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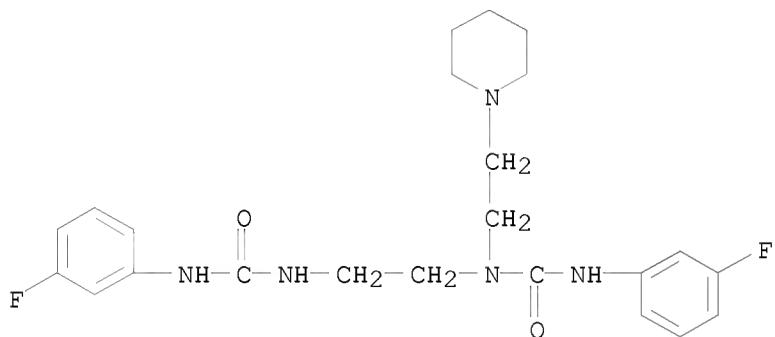
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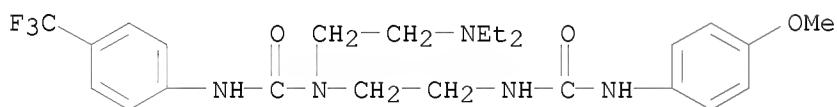
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CN INDEX NAME NOT YET ASSIGNED



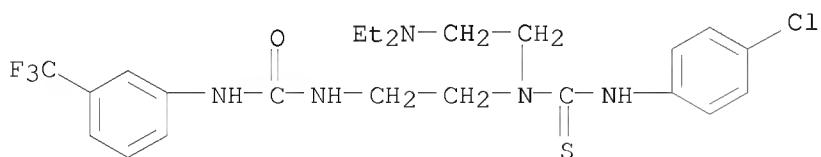
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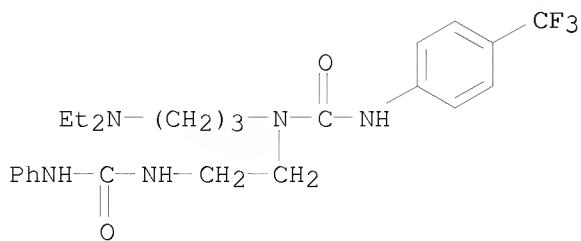
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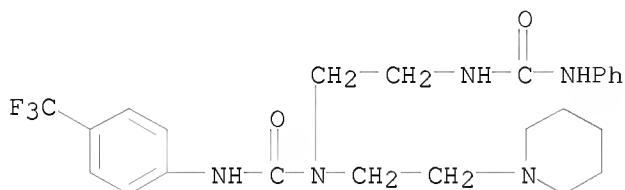
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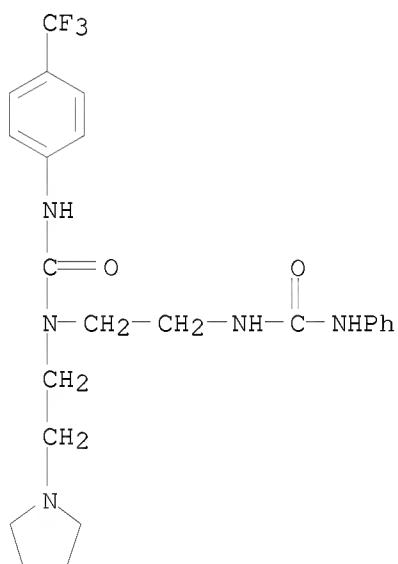
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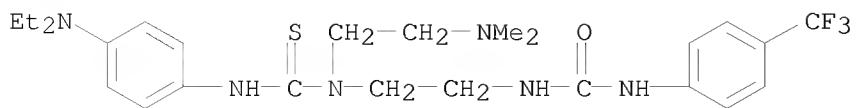
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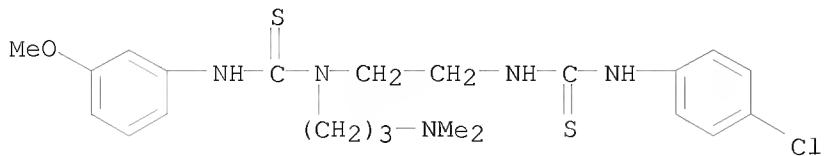
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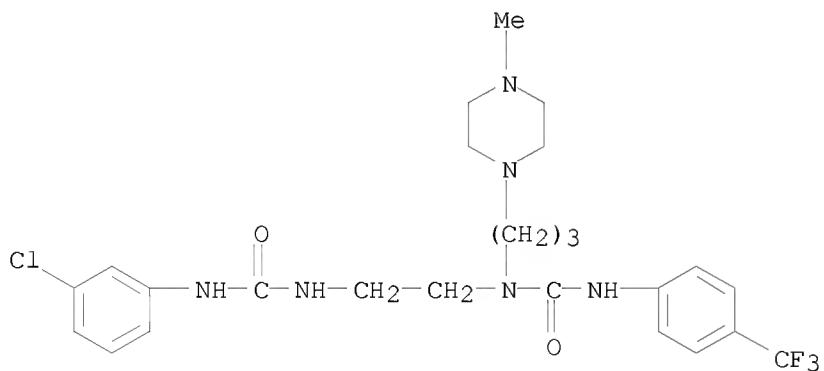
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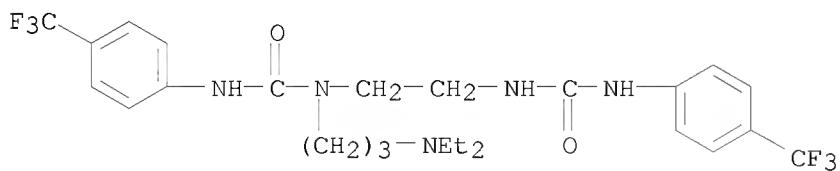
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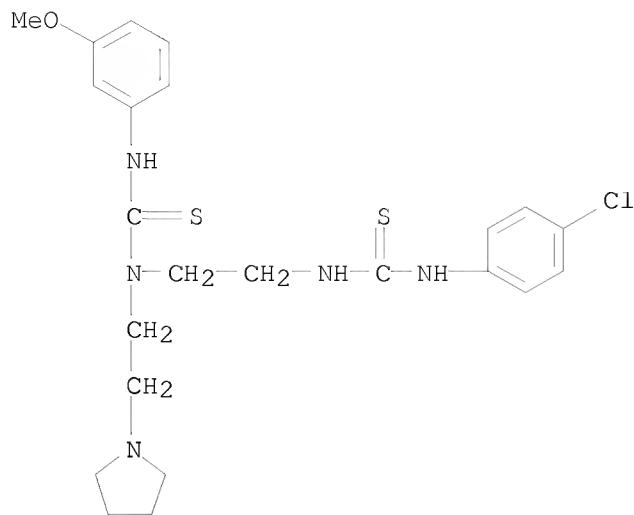
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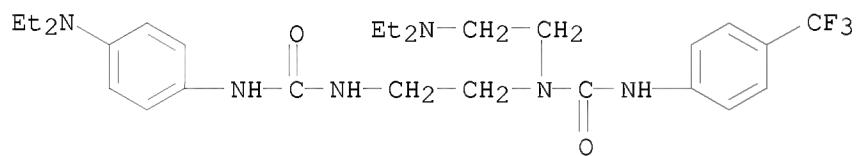
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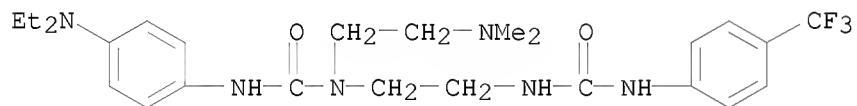
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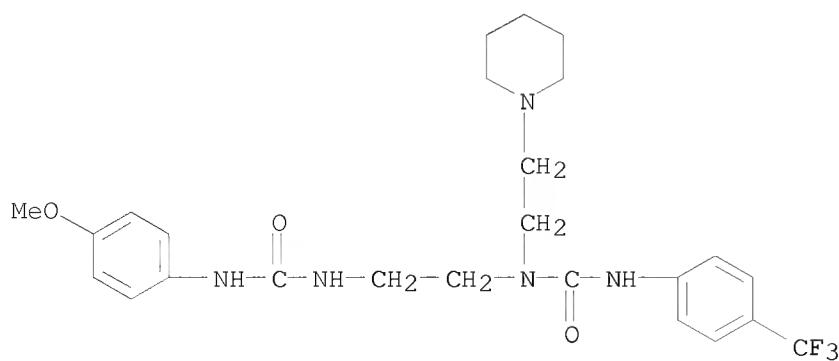
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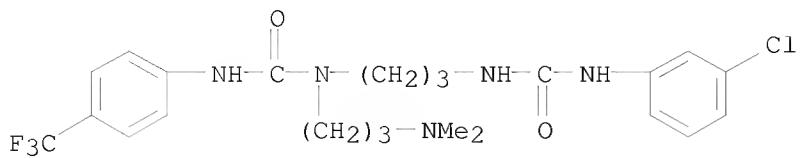
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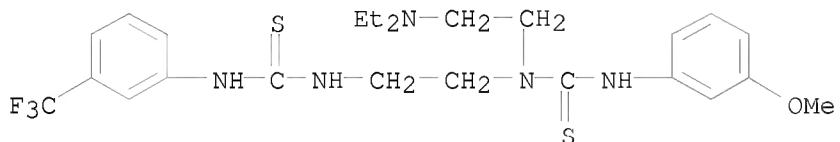
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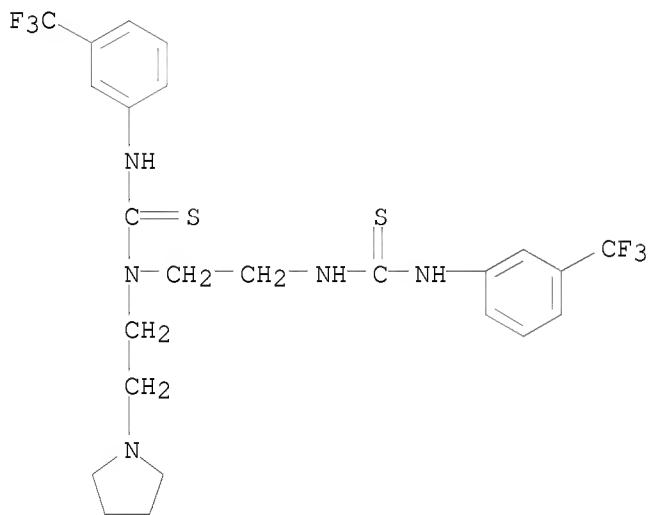
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CN INDEX NAME NOT YET ASSIGNED



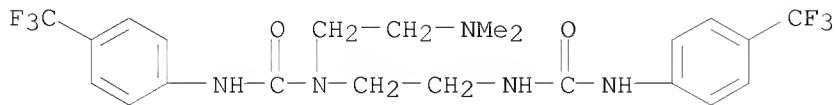
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CN INDEX NAME NOT YET ASSIGNED



RN 1044679-75-5 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



RN 1044679-80-2 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



IT 862807-90-7P 862807-92-9P 862807-94-1P

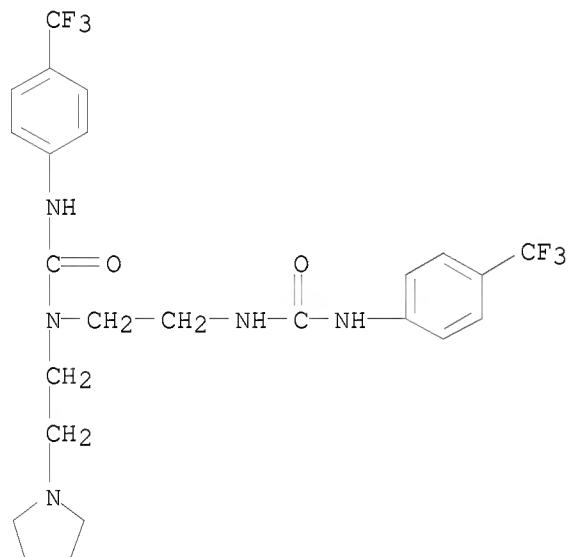
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862809-05-0P	862809-09-4P	

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of diurea derivs. as inhibitors of the production of pro-inflammatory cytokines, especially interleukin-2 (IL-2))

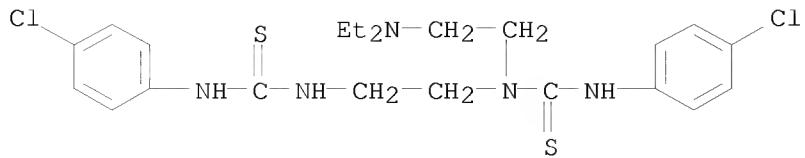
RN 862807-90-7 CAPLUS

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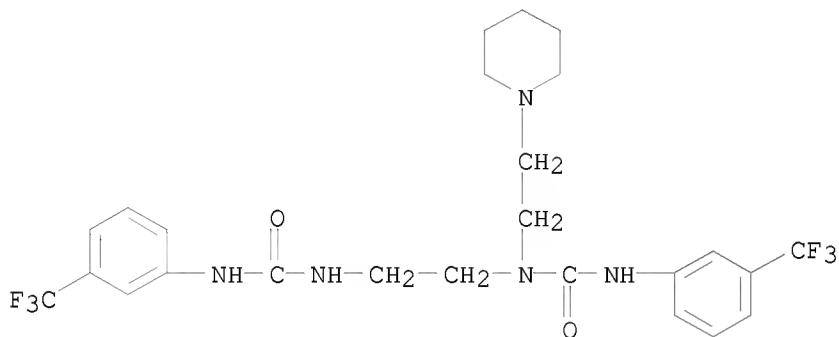


RN 862807-92-9 CAPLUS

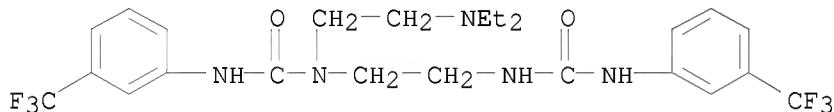
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RN 862807-94-1 CAPLUS
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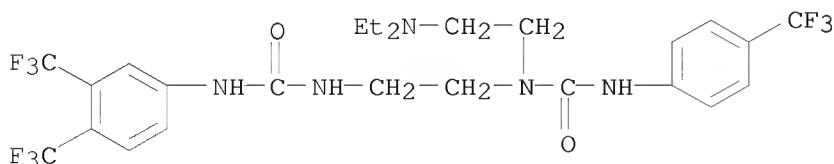


RN 862807-96-3 CAPLUS
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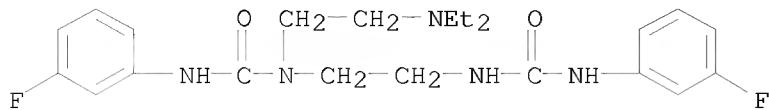
● HCl

RN 862807-98-5 CAPLUS
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RN 862808-00-2 CAPLUS

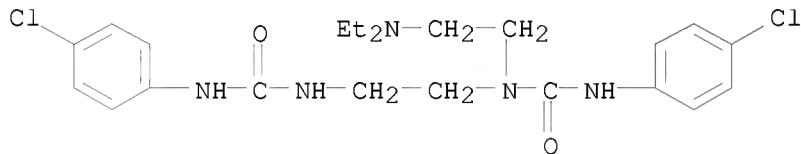
CN Urea, N-[2-[2-(diethylamino)ethyl][[[(3-fluorophenyl)amino]carbonyl]amino]ethyl]-N'-(3-fluorophenyl)-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

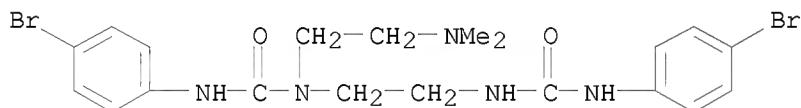
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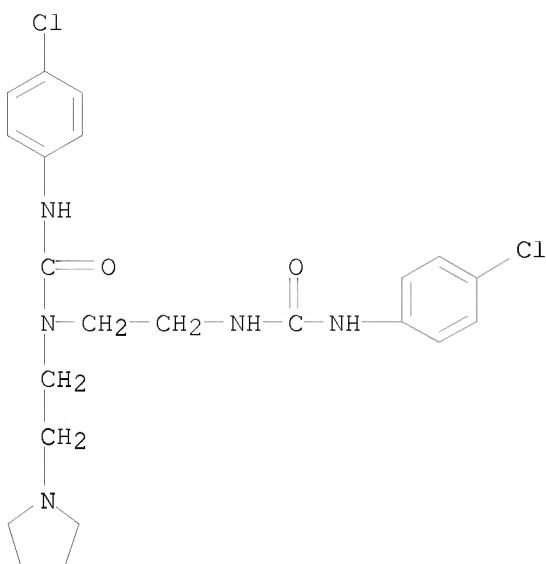
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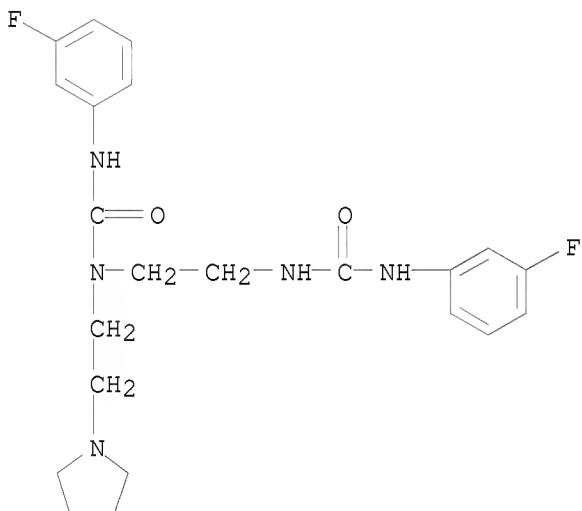


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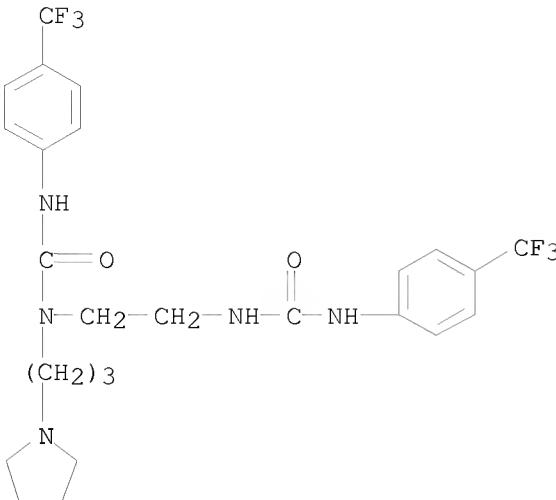
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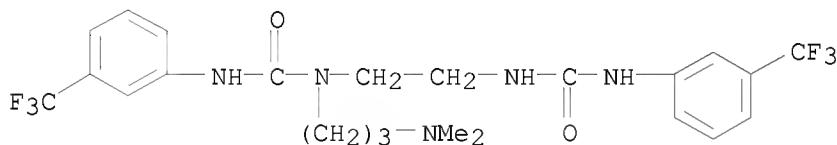
RN 862808-08-0 CAPLUS
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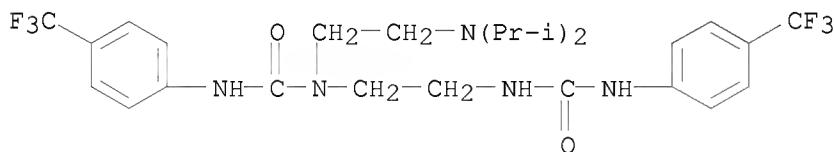
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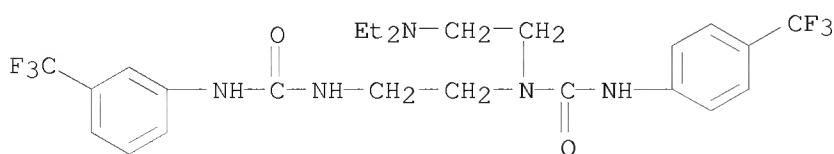
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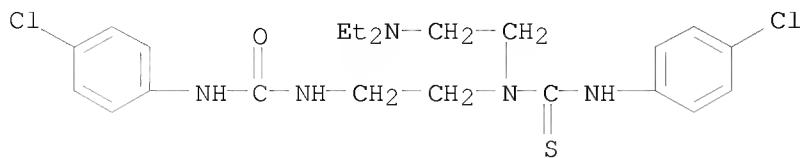
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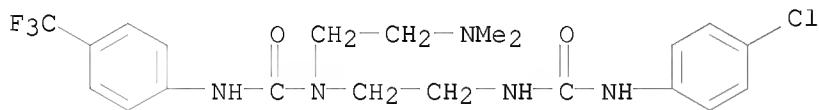
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RN 862808-20-6 CAPLUS
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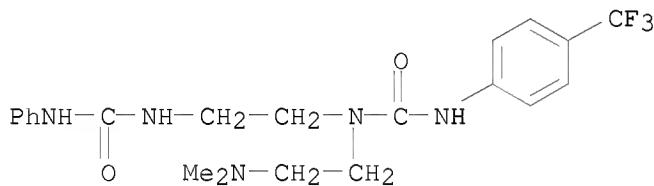


RN 862808-22-8 CAPLUS
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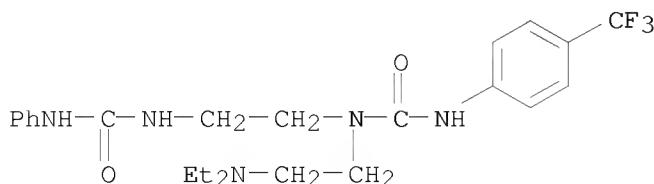


● HCl

RN 862808-24-0 CAPLUS
CN Urea, N-[2-(dimethylamino)ethyl]-N-[2-[[phenylamino]carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

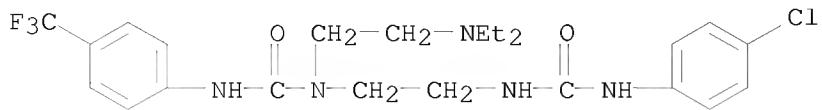


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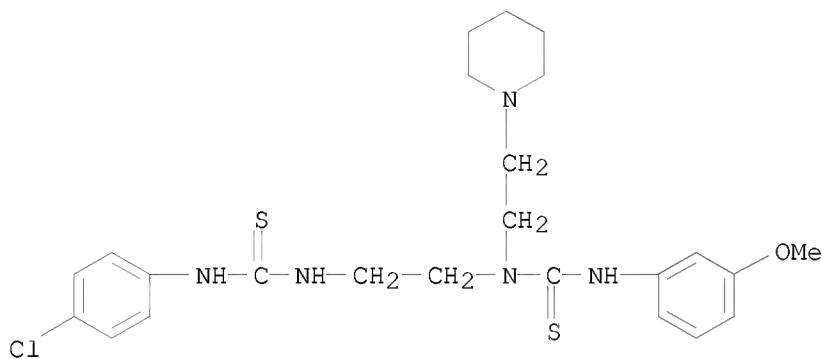
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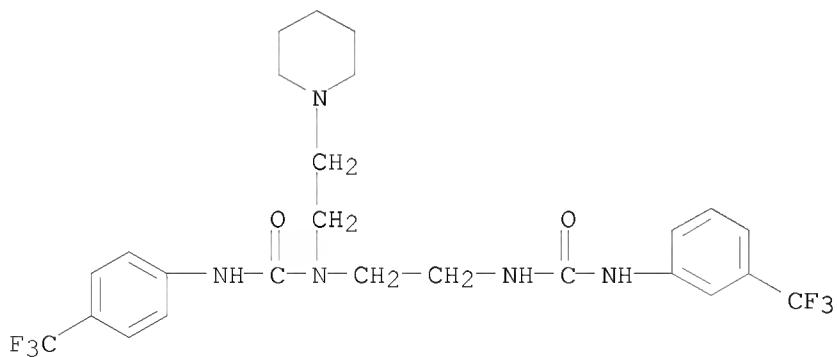
RN 862808-30-8 CAPLUS

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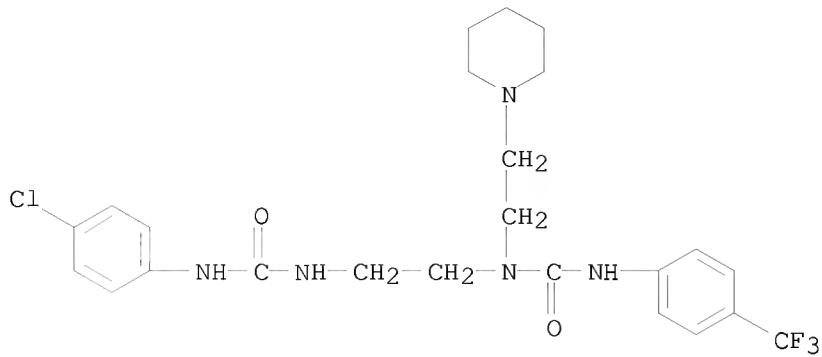
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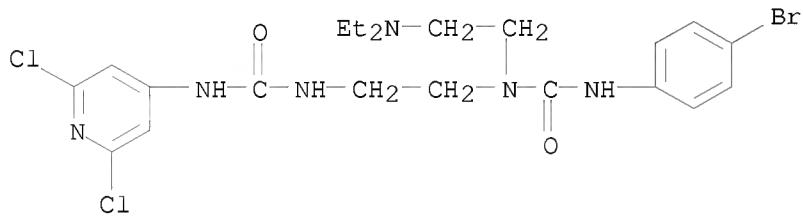
RN 862808-34-2 CAPLUS

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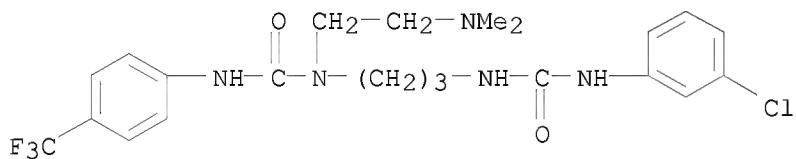
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CN Urea, N-[2-[(4-bromophenyl)amino]carbonyl][2-(diethylamino)ethyl]amino]ethyl]-N'-(2,6-dichloro-4-pyridinyl)- (CA INDEX NAME)



RN 862808-40-0 CAPLUS

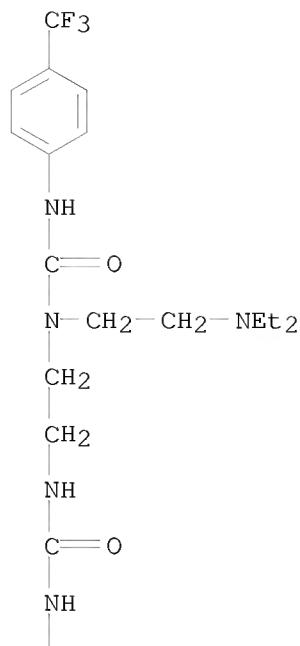
CN Urea, N-[3-[(3-chlorophenyl)amino]carbonyl]amino]propyl]-N-[2-(dimethylamino)ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



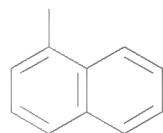
RN 862808-42-2 CAPLUS

CN Urea, N-[2-(diethylamino)ethyl]-N-[2-[(1-naphthalenylamino)carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

PAGE 1-A

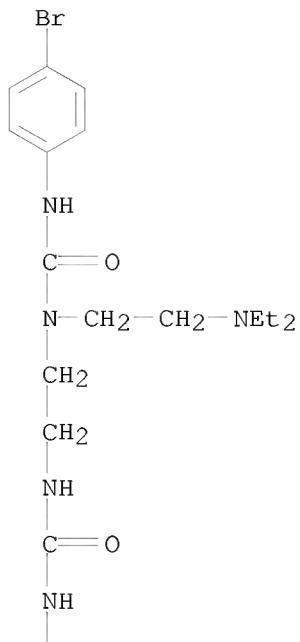


PAGE 2-A

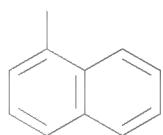


RN 862808-44-4 CAPLUS
CN Urea, N-[2-[[[4-bromophenyl]amino]carbonyl][2-(diethylamino)ethyl]amino]ethyl]-N'-1-naphthalenyl- (CA INDEX NAME)

PAGE 1-A

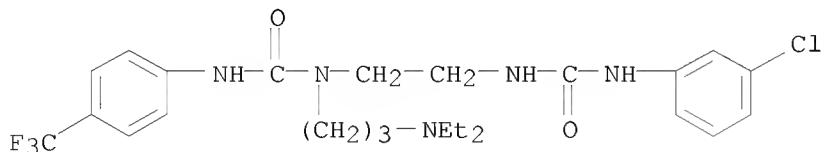


PAGE 2-A



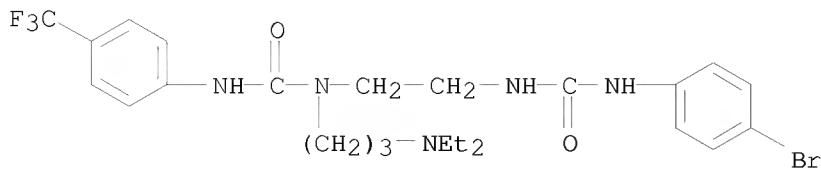
RN 862808-46-6 CAPLUS

CN Urea, N-[2-[[[3-chlorophenyl]amino]carbonyl]amino]ethyl]-N-[3-(diethylamino)propyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

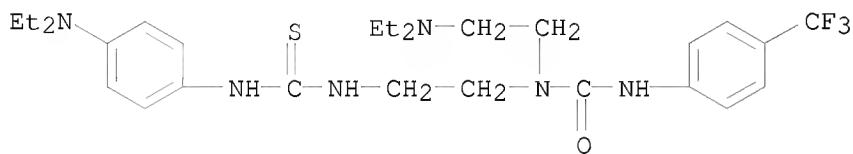


RN 862808-48-8 CAPLUS

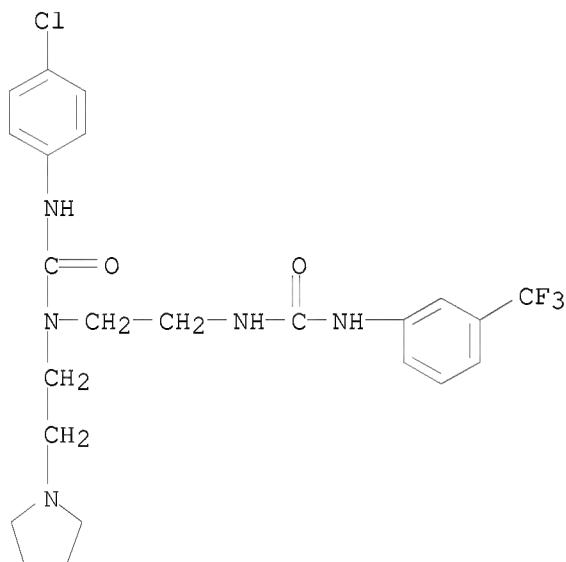
CN Urea, N-[2-[[[4-bromophenyl]amino]carbonyl]amino]ethyl]-N-[3-(diethylamino)propyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



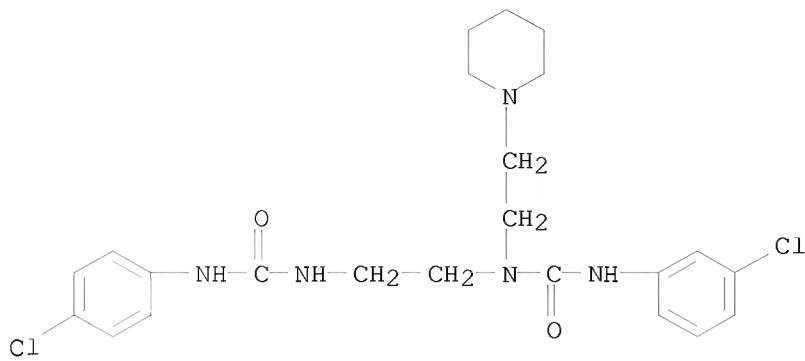
RN 862808-50-2 CAPLUS
 CN Urea, N-[2-(diethylamino)ethyl]-N-[2-[[[4-(diethylamino)phenyl]amino]thioxomethyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 862808-52-4 CAPLUS
 CN Urea, N-[2-[[[4-chlorophenyl]amino]carbonyl][2-(1-pyrrolidinyl)ethyl]amino]ethyl]-N'-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

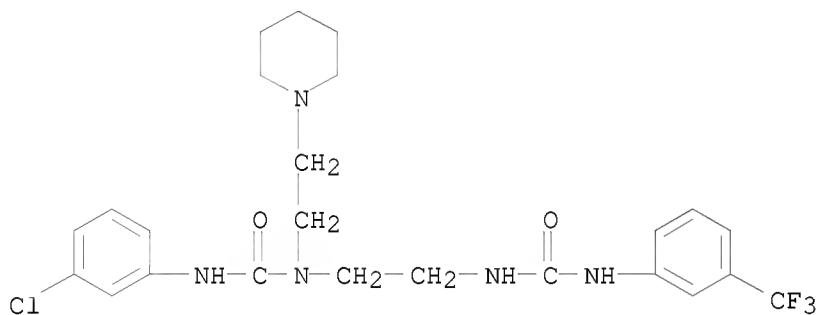


RN 862808-54-6 CAPLUS
 CN Urea, N'-(3-chlorophenyl)-N-[2-[[[4-chlorophenyl]amino]carbonyl]amino]ethyl]-N-[2-(1-piperidinyl)ethyl]- (CA INDEX NAME)



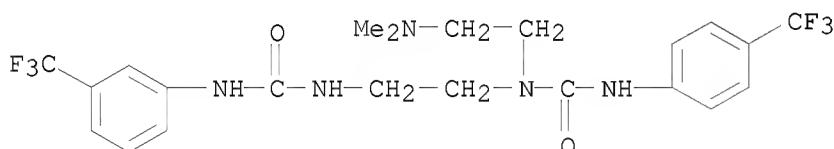
RN 862808-56-8 CAPLUS

CN Urea, N-[2-[(3-chlorophenyl)amino]carbonyl][2-(1-piperidinyl)ethyl]amino]ethyl]-N'-(3-(trifluoromethyl)phenyl)- (CA INDEX NAME)



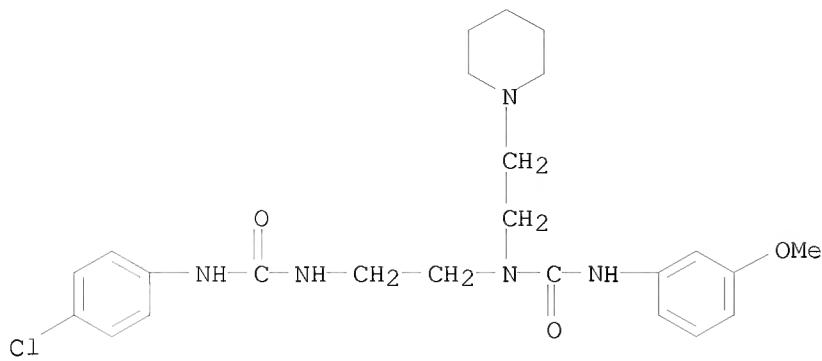
RN 862808-58-0 CAPLUS

CN Urea, N-[2-[(2-(dimethylamino)ethyl)[{[4-(trifluoromethyl)phenyl]amino}carbonyl]amino]ethyl]-N'-(3-(trifluoromethyl)phenyl)- (CA INDEX NAME)



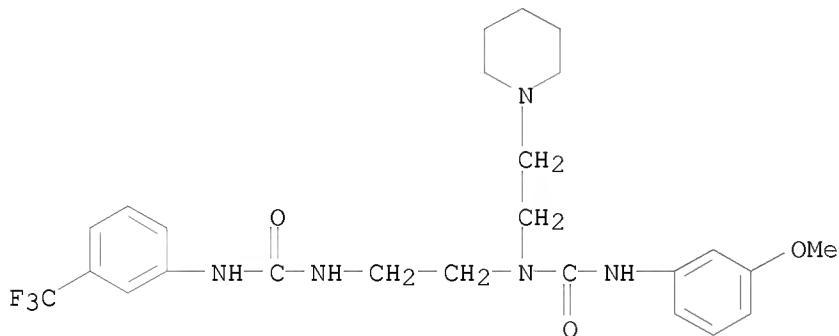
RN 862808-60-4 CAPLUS

CN Urea, N-[2-[(4-chlorophenyl)amino]carbonyl]amino]ethyl]-N'-(3-methoxyphenyl)-N-[2-(1-piperidinyl)ethyl]- (CA INDEX NAME)



RN 862808-62-6 CAPLUS

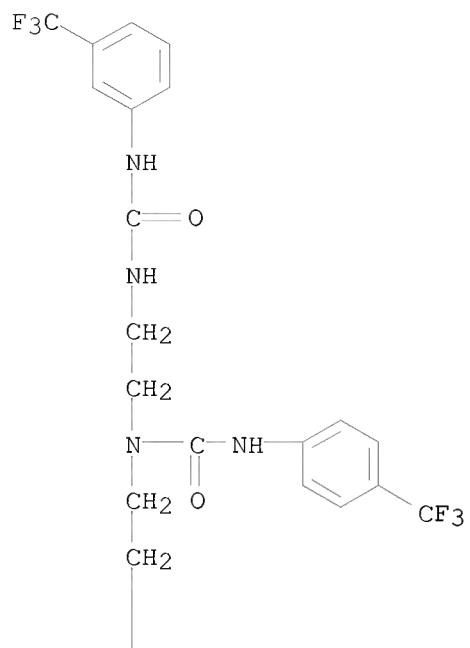
CN Urea, N-[2-[(3-methoxyphenyl)amino]carbonyl][2-(1-piperidinyl)ethyl]aminoethyl]-N'-(3-(trifluoromethyl)phenyl)-(CA INDEX NAME)



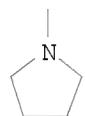
RN 862808-64-8 CAPLUS

CN Urea, N-[2-[(2-(1-pyrrolidinyl)ethyl)[[4-(trifluoromethyl)phenyl]amino]carbonyl]aminoethyl]-N'-(3-(trifluoromethyl)phenyl)-(CA INDEX NAME)

PAGE 1-A

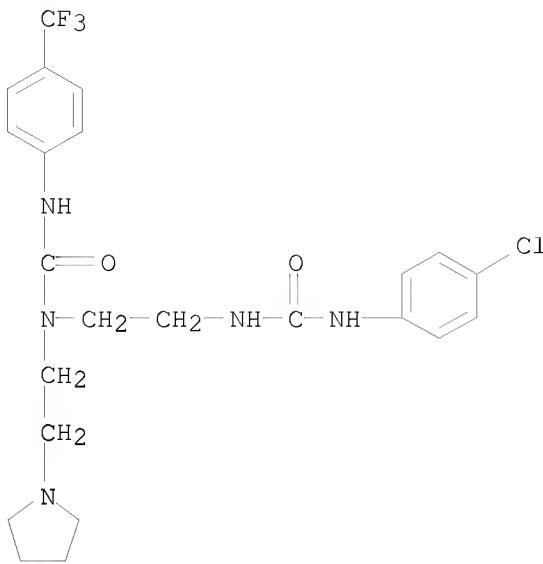


PAGE 2-A



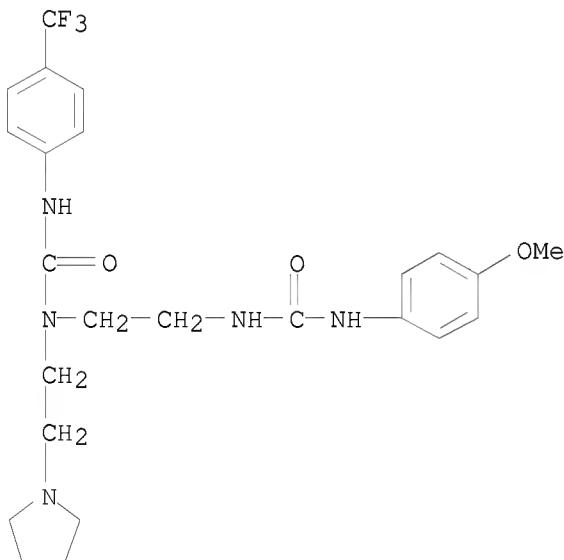
RN 862808-66-0 CAPLUS

CN Urea, N-[2-[[[(4-chlorophenyl)amino]carbonyl]amino]ethyl]-N-[2-(1-pyrrolidinyl)ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



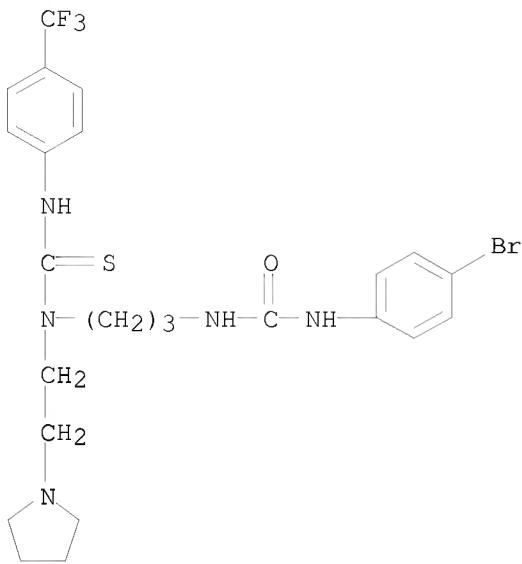
RN 862808-68-2 CAPLUS

CN Urea, N-[2-[(4-methoxyphenyl)amino]carbonyl]aminoethyl]-N-[2-(1-pyrrolidinyl)ethyl]-N'-(4-(trifluoromethyl)phenyl)- (CA INDEX NAME)



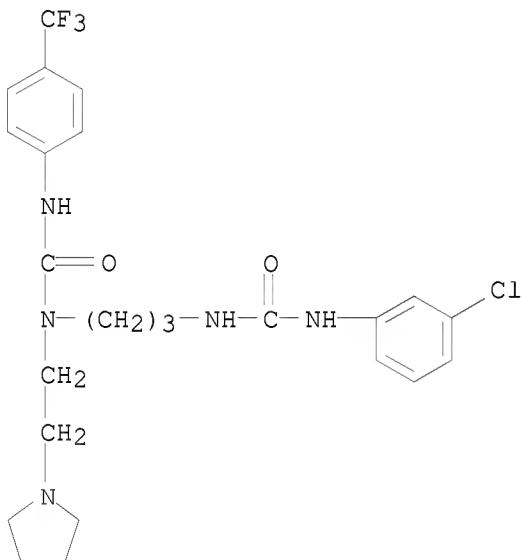
RN 862808-70-6 CAPLUS

CN Urea, N-(4-bromophenyl)-N'-(3-[(2-(1-pyrrolidinyl)ethyl]thioxo[4-(trifluoromethyl)phenyl]amino)methyl]amino]propyl)- (CA INDEX NAME)



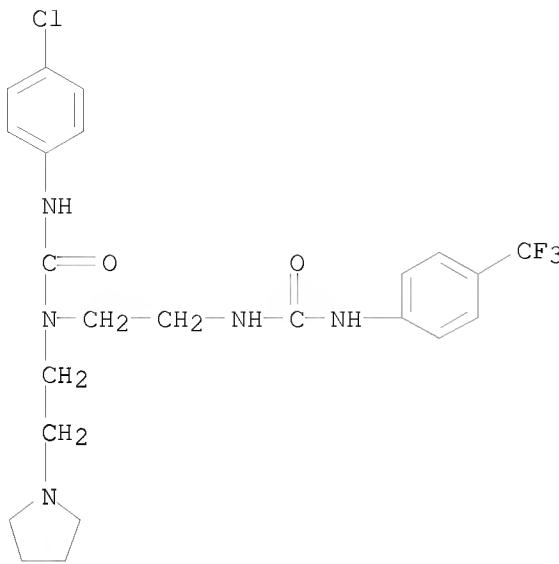
RN 862808-72-8 CAPLUS

CN Urea, N-[3-[(3-chlorophenyl)amino]carbonyl]amino]propyl]-N-[2-(1-pyrrolidinyl)ethyl]-N'-(4-(trifluoromethyl)phenyl)- (CA INDEX NAME)



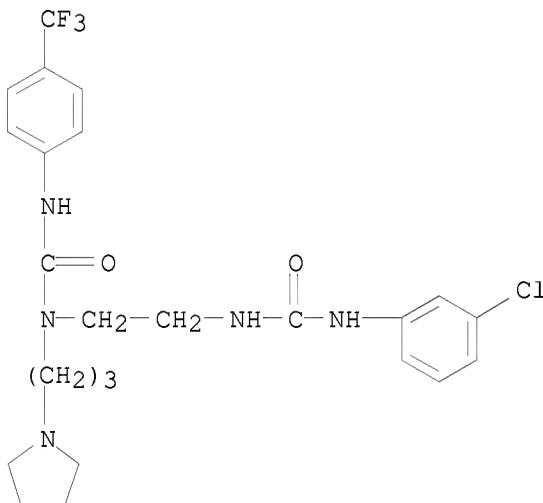
RN 862808-74-0 CAPLUS

CN Urea, N-[2-[(4-chlorophenyl)amino]carbonyl] [2-(1-pyrrolidinyl)ethyl]amino]ethyl]-N'-(4-(trifluoromethyl)phenyl)- (CA INDEX NAME)



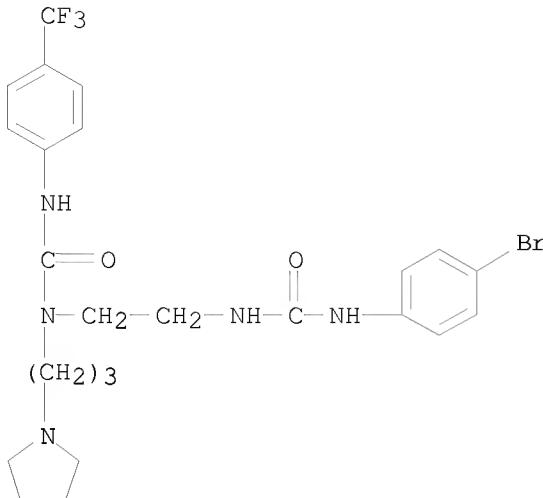
RN 862808-76-2 CAPLUS

CN Urea, N-[2-[(3-chlorophenyl)amino]carbonyl]aminoethyl-N-[3-(1-pyrrolidinyl)propyl]-N'-(4-(trifluoromethyl)phenyl)- (CA INDEX NAME)



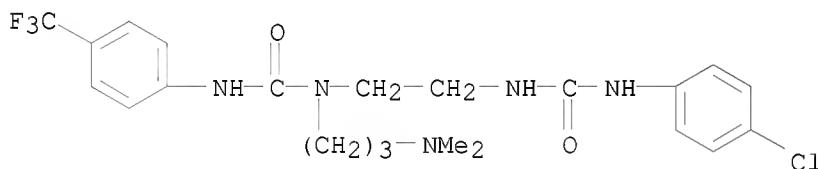
RN 862808-78-4 CAPLUS

CN Urea, N-[2-[(4-bromophenyl)amino]carbonyl]aminoethyl-N-[3-(1-pyrrolidinyl)propyl]-N'-(4-(trifluoromethyl)phenyl)- (CA INDEX NAME)



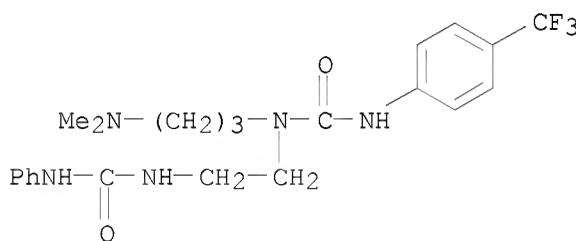
RN 862808-80-8 CAPLUS

CN Urea, N-[2-[[(4-chlorophenyl)amino]carbonyl]amino]ethyl]-N-[3-(dimethylamino)propyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



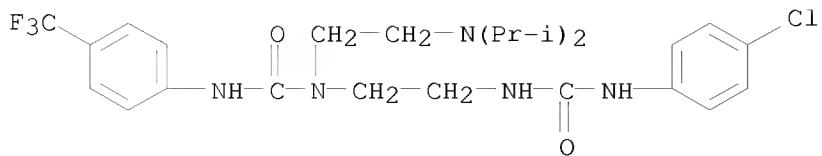
RN 862808-82-0 CAPLUS

CN Urea, N-[3-(dimethylamino)propyl]-N-[2-[(phenylamino)carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



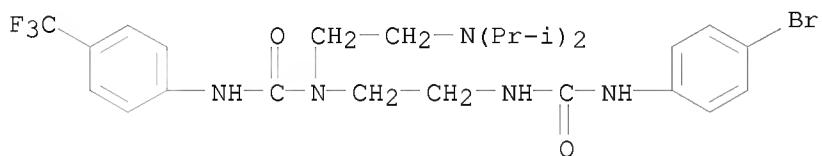
RN 862808-84-2 CAPLUS

CN Urea, N-[2-[bis(1-methylethyl)amino]ethyl]-N-[2-[[(4-chlorophenyl)amino]carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



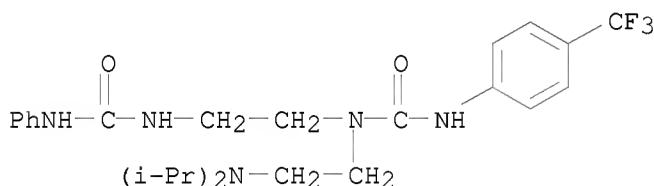
RN 862808-86-4 CAPLUS

CN Urea, N-[2-[bis(1-methylethyl)amino]ethyl]-N-[2-[[(4-bromophenyl)amino]carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 862808-88-6 CAPLUS

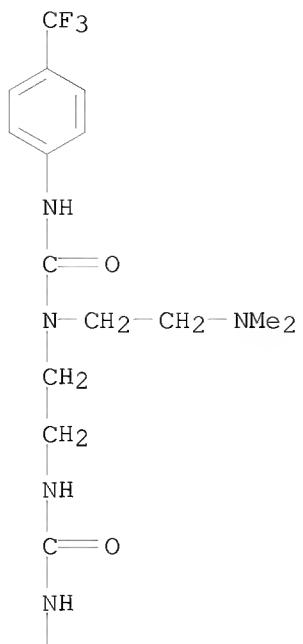
CN Urea, N-[2-[bis(1-methylethyl)amino]ethyl]-N-[2-[(phenylamino)carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



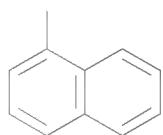
RN 862808-90-0 CAPLUS

CN Urea, N-[2-(dimethylamino)ethyl]-N-[2-[(1-naphthalenylamino)carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

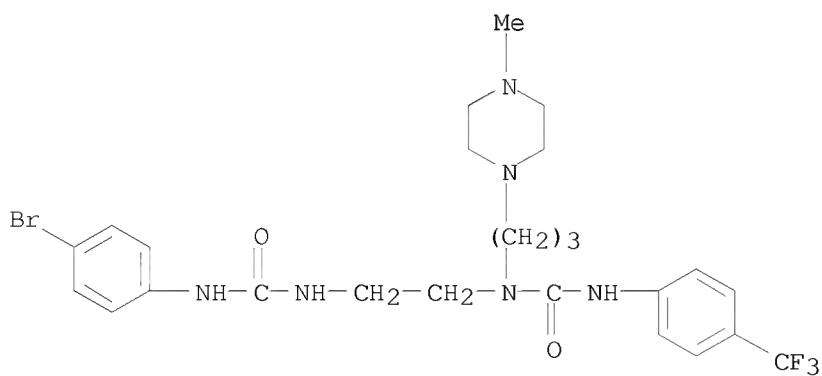
PAGE 1-A



PAGE 2-A

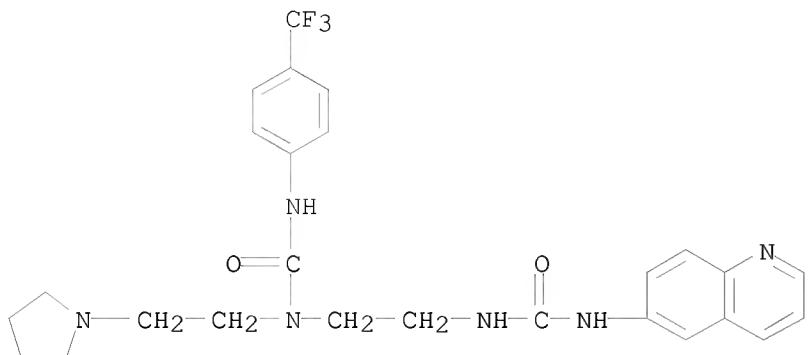


RN 862808-92-2 CAPLUS
CN Urea, N-[2-[[[(4-bromophenyl)amino]carbonyl]amino]ethyl]-N-[3-(4-methyl-1-piperazinyl)propyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



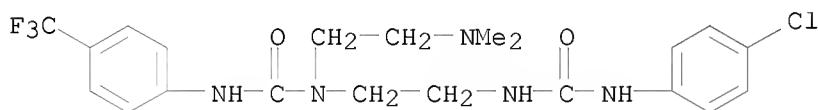
RN 862808-94-4 CAPLUS

CN Urea, N-[2-(1-pyrrolidinyl)ethyl]-N-[2-[(6-quinolinylamino)carbonyl]amino]ethyl]-N'-(4-(trifluoromethyl)phenyl)- (CA INDEX NAME)



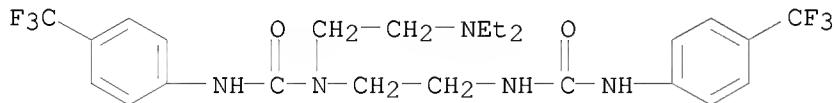
RN 862809-05-0 CAPLUS

CN Urea, N-[2-[(4-chlorophenyl)amino]carbonyl]amino]ethyl]-N-[2-(dimethylamino)ethyl]-N'-(4-(trifluoromethyl)phenyl)- (CA INDEX NAME)



RN 862809-09-4 CAPLUS

CN Urea, N-[2-[(2-(diethylamino)ethyl)[[(4-(trifluoromethyl)phenyl)amino]carbonyl]amino]ethyl]-N'-(4-(trifluoromethyl)phenyl)- (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2002:865481 CAPLUS

DN 139:303935

TI High-resolution reversed-phase high-performance liquid chromatography analysis of polyamines and their monoacetyl conjugates by fluorescence detection after derivatization with N-hydroxysuccinimidyl 6-quinolinyl carbamate. [Erratum to document cited in CA127:78027]

AU Weiss, Thomas; Bernhardt, Gunther; Buschauer, Armin; Jauch, Karl-Walter; Zirngibl, Hubert

CS Dep. Surgery, Univ. Regensburg, Regensburg, D-93042, Germany

SO Analytical Biochemistry (2002), 311(1), 100

CODEN: ANBCA2; ISSN: 0003-2697

PB Elsevier Science

DT Journal

LA English

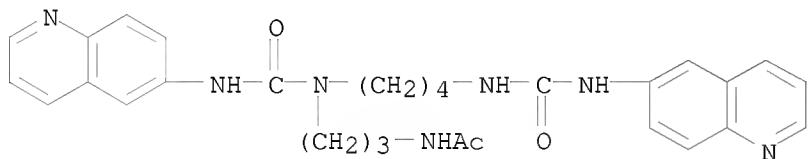
AB In Figures 3, 5, and 7, the compound nos. for spermine 11 and the internal standard (IS) 1,7-diaminoheptane 12 were erroneously exchanged. In Table 3, the internal standard (IS) 1,7-diaminoheptane was designated compound 13 instead of 12.

IT 191729-96-1P 191729-97-2P 191729-98-3P
191729-99-4P 191730-00-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(high-resolution reversed-phase HPLC anal. of polyamines and their monoacetyl conjugates by fluorescence detection after derivatization with N-hydroxysuccinimidyl 6-quinolinyl carbamate (Erratum))

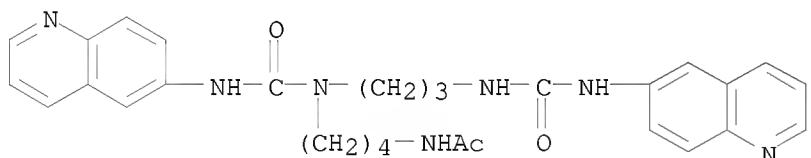
RN 191729-96-1 CAPLUS

CN Acetamide, N-[3-[(6-quinolinylamino)carbonyl][4-[(6-quinolinylamino)carbonyl]amino]butyl]amino]propyl]- (CA INDEX NAME)



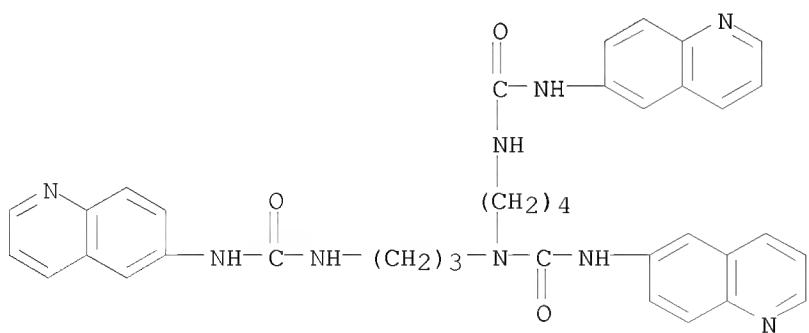
RN 191729-97-2 CAPLUS

CN Acetamide, N-[4-[(6-quinolinylamino)carbonyl][3-[(6-quinolinylamino)carbonyl]amino]propyl]amino]butyl]- (CA INDEX NAME)

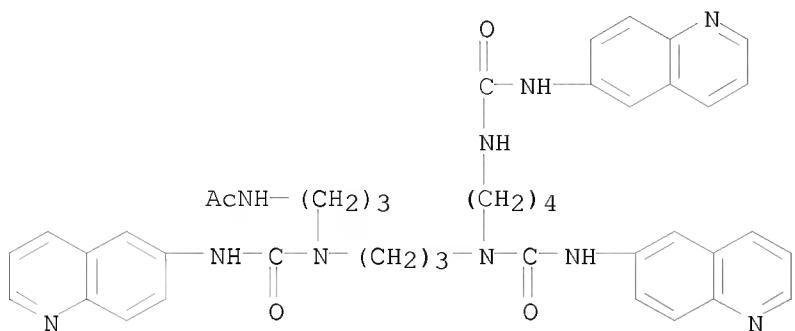


RN 191729-98-3 CAPLUS

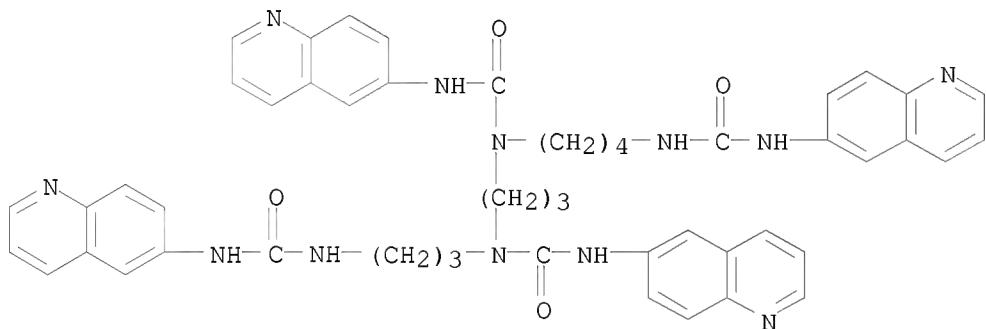
CN Urea, N'-6-quinolinyl-N-[4-[(6-quinolinylamino)carbonyl]amino]butyl]-N-[3-[(6-quinolinylamino)carbonyl]amino]propyl]- (CA INDEX NAME)



RN 191729-99-4 CAPLUS
CN 2,7,11,15-Tetraazaheptadecanamide,
16-oxo-N-6-quinolinyl-7,11-bis[(6-quinolinylamino)carbonyl]- (CA INDEX
NAME)



RN 191730-00-4 CAPLUS
CN 2,6,10,15-Tetraazahexadecanediamide,
N1,N16-di-6-quinolinyl-6,10-bis[(6-quinolinylamino)carbonyl]- (CA INDEX
NAME)



L4 ANSWER 7 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
AN 1997:342994 CAPLUS
DN 127:78027
OREF 127:14857a
TI High-resolution reversed-phase high-performance liquid chromatography analysis of polyamines and their monoacetyl conjugates by fluorescence detection after derivatization with N-hydroxysuccinimidyl 6-quinolinyl carbamate
AU Weiss, Thomas; Bernhardt, Gunther; Buschauer, Armin; Jauch, Karl-Walter;
Zirngibl, Hubert
CS Dep. Surgery, Univ. Regensburg, Regensburg, D-93042, Germany
SO Analytical Biochemistry (1997), 247(2), 294-304
CODEN: ANBCA2; ISSN: 0003-2697
PB Academic
DT Journal
LA English
AB A highly sensitive, accurate, and reproducible HPLC method for the determination

of all natural polyamines and their monoacetyl conjugates is described. The presented method is based on precolumn derivatization with N-hydroxysuccinimidyl 6-quinolinyl carbamate (HSQC) followed by C18-HPLC separation using a ternary gradient and fluorescence detection ($\lambda_{Ex}=248$ nm, $\lambda_{Em} = 398$ nm). The derivs. of the four main polyamines (putrescine, cadaverine, spermidine, and spermine) and the internal standard were synthesized on a preparative scale and characterized, especially with respect to their molar absorptivities and fluorescence quantum yields. The limits of detection of the highly stable derivs. ranged from 30 to 130 fmol (injection volume 10 μ l) for putrescine and N-acetylcadaverine, resp. (signal to noise ratio = 10), with excellent linearity within the range from 1 to 100 μ M. High reproducibility for both retention times and peak areas, with coeffs. of variation ranging from 0.14 to 0.88% and from 1.83 to 3.80%, resp., were achieved. Provided that deproteinization of the samples was carried out immediately, recoveries of the analytes from homogenates of pancreatic cancer xeno-grafts were high and reproducible. The optimized method was applied to the determination of the polyamine content of cultured pancreatic cancer cells and of tissue from colorectal adenocarcinoma, proving precise and reproducible quantification in these complex biol. matrixes.

IT 191729-96-1P 191729-97-2P 191729-98-3P

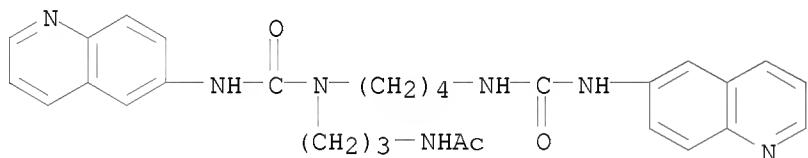
191729-99-4P 191730-00-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(high-resolution reversed-phase HPLC anal. of polyamines and their monoacetyl conjugates by fluorescence detection after derivatization with N-hydroxysuccinimidyl 6-quinolinyl carbamate)

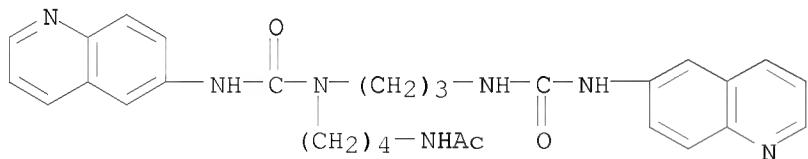
RN 191729-96-1 CAPLUS

CN Acetamide, N-[3-[(6-quinolinylamino)carbonyl][4-[(6-quinolinylamino)carbonyl]amino]butyl]amino]propyl]- (CA INDEX NAME)



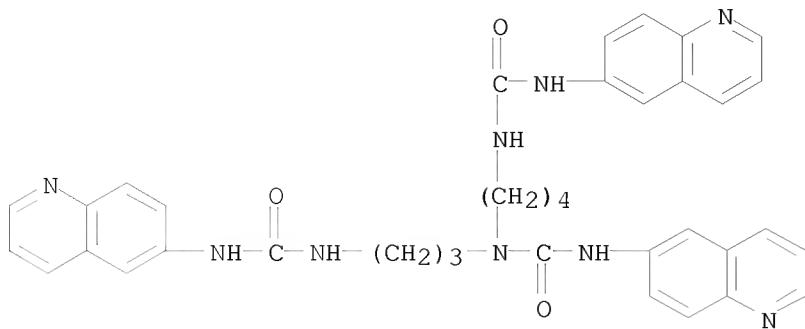
RN 191729-97-2 CAPLUS

CN Acetamide, N-[4-[(6-quinolinylamino)carbonyl][3-[(6-quinolinylamino)carbonyl]amino]propyl]amino]butyl]- (CA INDEX NAME)

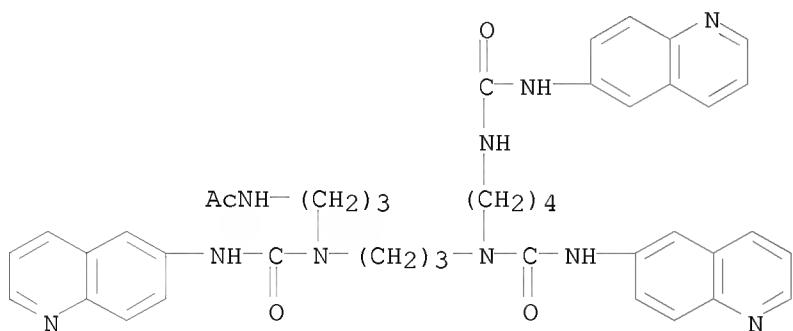


RN 191729-98-3 CAPLUS

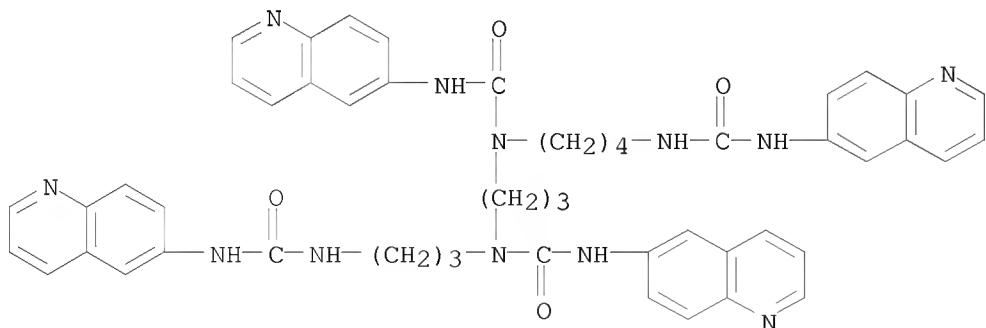
CN Urea, N'-6-quinolinyl-N-[4-[(6-quinolinylamino)carbonyl]amino]butyl]-N-[3-[(6-quinolinylamino)carbonyl]amino]propyl]- (CA INDEX NAME)



RN 191729-99-4 CAPLUS
 CN 2,7,11,15-Tetraazaheptadecanamide,
 16-oxo-N-6-quinolinyl-7,11-bis[(6-quinolinylamino)carbonyl]- (CA INDEX
 NAME)



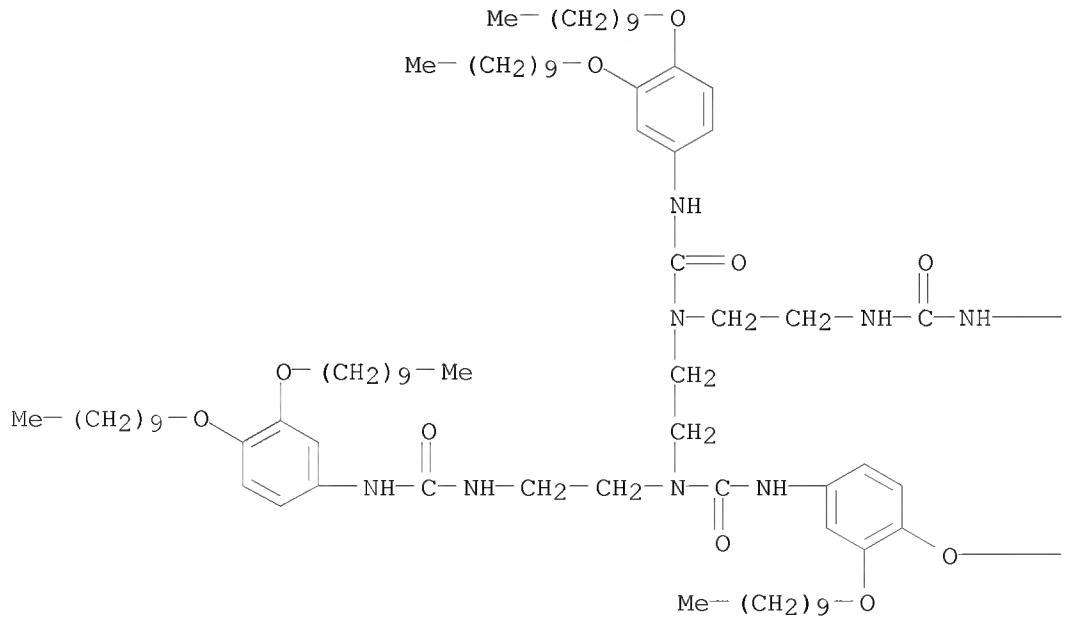
RN 191730-00-4 CAPLUS
 CN 2,6,10,15-Tetraazahexadecanediamide,
 N1,N16-di-6-quinolinyl-6,10-bis[(6-quinolinylamino)carbonyl]- (CA INDEX
 NAME)

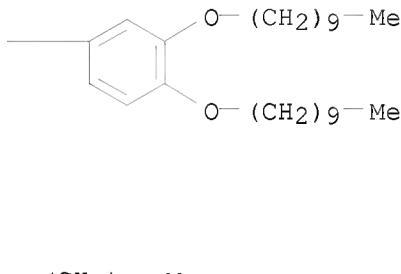


OSC.G 33 THERE ARE 33 CAPLUS RECORDS THAT CITE THIS RECORD (33 CITINGS)
 RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 1997:268152 CAPLUS
 DN 127:11327
 OREF 127:2213a, 2216a
 TI Liquid crystalline derivatives of oligoethylene-amines and -amino ethers with amide, ester, urea or urethane functions
 AU Stebani, Uwe; Lattermann, Gunter; Wittenberg, Michael; Wendorff, Joachim Heinz
 CS Makromolekulare Chemie I, Universitat Bayreuth, Bayreuth, D-95440, Germany
 SO Journal of Materials Chemistry (1997), 7(4), 607-614
 CODEN: JMACEP; ISSN: 0959-9428
 PB Royal Society of Chemistry
 DT Journal
 LA English
 AB The mesomorphism of diethylenetriamine and triethylenetetramine derivs., substituted with the 3,4-bis(decyloxy)benzoyl group ('two chain' substituent) via amide, ester, urea or urethane moieties, is described. Also, different examples of related linear and cyclic oligoethyleneamino ethers were studied and compared with the mesomorphism of the 1st group. Both lamellar smectic A and hexagonal columnar mesophases can be observed in linear compds., depending on the length of the linear unit. A cyclic derivative displays a cubic phase. The conclusion is emphasized that the mesomorphism of these classes of compds. is caused by microphase separation
 IT 190275-30-0P
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
 (preparation and liquid crystal properties of)
 RN 190275-30-0 CAPLUS
 CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-bis[3,4-bis(decyloxy)phenyl]-5,8-bis[[3,4-bis(decyloxy)phenyl]amino]carbonyl- (CA INDEX NAME)

PAGE 1-A





— (CH₂)₉-Me

OSC.G 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)
 RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 1993:131352 CAPLUS
 DN 118:131352
 OREF 118:22591a,22594a
 TI Antifoaming agent for foam control of waters containing proteins and its use
 IN Rasp, Christian
 PA Bayer A.-G., Germany
 SO Ger. Offen., 8 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 4104869	A1	19920820	DE 1991-4104869 DE 1991-4104869	19910217 19910217

AB Foaming in wastewaters, e.g., from slaughterhouses, containing 50 ppm to 0.5 weight% proteins, is prevented using a modified polyether (I), where R is II. A suitable agent is I where R₁ = R₂ = R₄ = H, R₃ = Me, R₅ = n-Bu, p = q = 0, x = 21, y = 16, R₆ = 2,4-toluylene, and R₇ = C₂H₄.

IT 146349-56-6
 RL: PROC (Process)
 (antifoaming agent, for slaughterhouse wastewaters)
 RN 146349-56-6 CAPLUS
 CN Oxirane, methyl-, polymer with oxirane, ester with [3-[[[2-[[[5-[[(carboxyamino)carbonyl]amino]-2-methylphenyl]amino]carbonyl][2-[[[3-(carboxyamino)-4-methylphenyl]amino]carbonyl]amino]ethyl]amino]ethyl]amino]carbonyl]amino]-

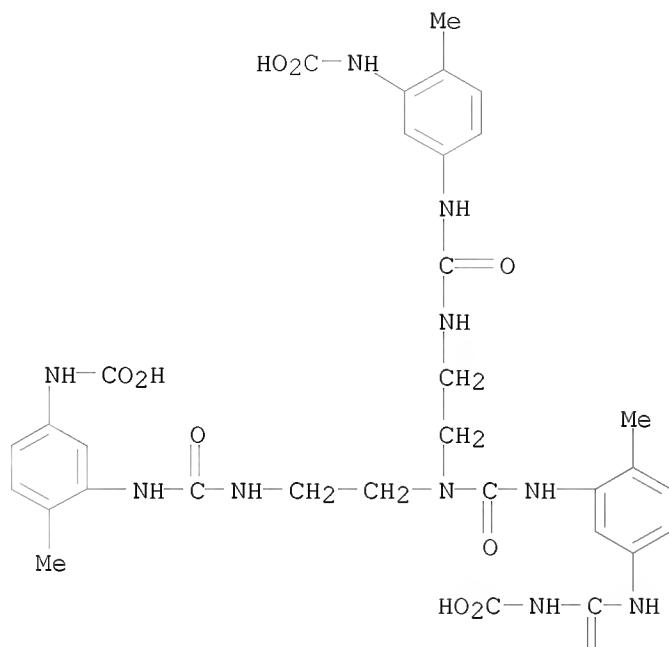
4-methylphenyl]carbamic acid (3:1), tributyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 177570-62-6

CMF C32 H38 N10 O10

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$\begin{array}{c} \parallel \\ \text{O} \end{array}$

CM 2

CRN 71-36-3

CMF C4 H10 O

$\text{H}_3\text{C}-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{OH}$

CM 3

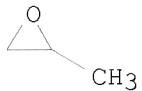
CRN 9003-11-6

CMF (C₃ H₆ O . C₂ H₄ O)_x

CCI PMS

CM 4

CRN 75-56-9
CMF C3 H6 O



CM 5

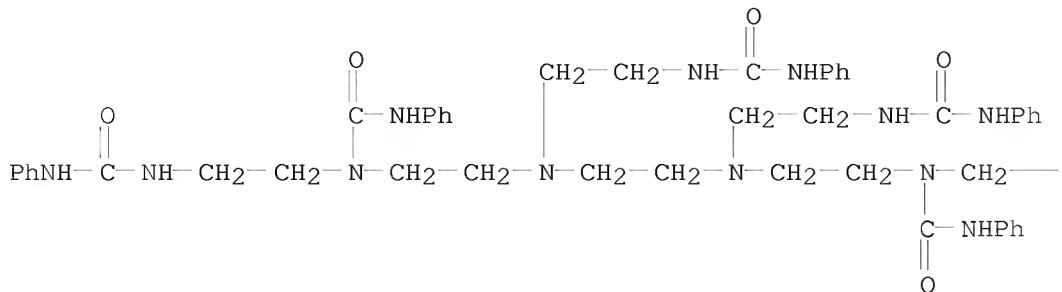
CRN 75-21-8
CMF C2 H4 O



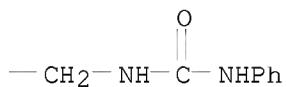
L4 ANSWER 10 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
AN 1993:101613 CAPLUS
DN 118:101613
OREF 118:17781a,17784a
TI Non-classical urea oligomers. Part XIV. Some new properties of copper(II) ion encircled by bis-branched oligomeric urea ligand: properties associated with catalysis for oxidative coupling of phenols
AU Araki, Takeo; Tanaka, N.; Hinokimori, T.; Hotta, K.; Tateishi, K.; Kubo, Y.; Yamaguchi, T.; Watanabe, K.; Fukuda, H.; Asa, H.
CS Dep. Polym. Sci. Eng., Kyoto Inst. Technol., Kyoto, 606, Japan
SO Journal of Molecular Catalysis (1992), 75(1), 21-40
CODEN: JMCADS; ISSN: 0304-5102
DT Journal
LA English
AB Bis-branched urea oligomers (B-urea) mainly composed of hexakis(N-acrylcarbamoyl)-[N3,N4-bis(ethylamino)]pentaethylenehexamine were obtained by the reaction of triethylenetetramine with 1,2-dibromoethane followed by treatment with PhNCO. Under neutral conditions the B-urea readily forms stable mononuclear Cu(II) complexes, e.g. I, in which a Cu(II) ion is almost fully surrounded by the B-urea ligand, as confirmed by magnetic susceptibility measurements. In the presence of oxygen, this Cu(II) complex (B-urea-Cu(II)) effectively catalyzes oxidative coupling of various substituted phenols, e.g. 2,6-di-tert-butyl-, 2,6-dimethyl-, and 2,6-di-tert-butyl-4-methylphenols. At the same time the Cu(II) ion is reduced to form the corresponding yellow B-urea-Cu(I) complex quant. The Cu(I) state is highly stable for storage in the solid state but can readily be reacted with oxygen in a reversible manner in solution
IT 144964-19-2 144976-66-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(complexation of, with copper(II))
RN 144964-19-2 CAPLUS
CN 2,5,8,11,14,17-Hexaazaoctadecanediamide,
N1,N18-diphenyl-5,14-bis[(phenylamino)carbonyl]-8,11-bis[2-

[[(phenylamino)carbonyl]amino]ethyl]- (CA INDEX NAME)

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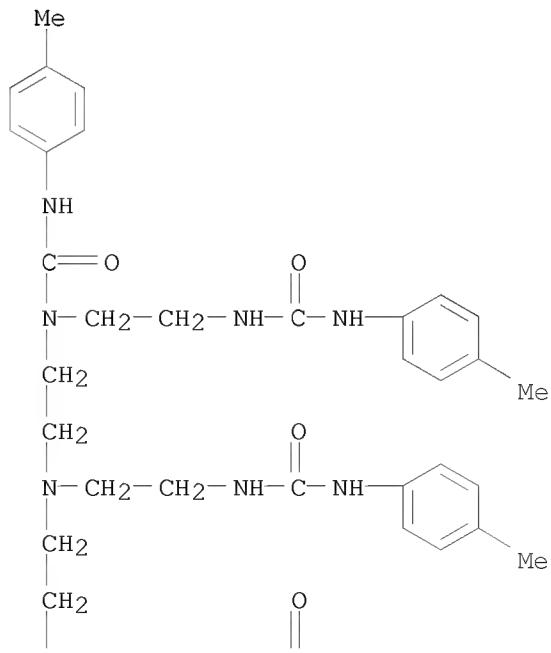
PAGE 1-B

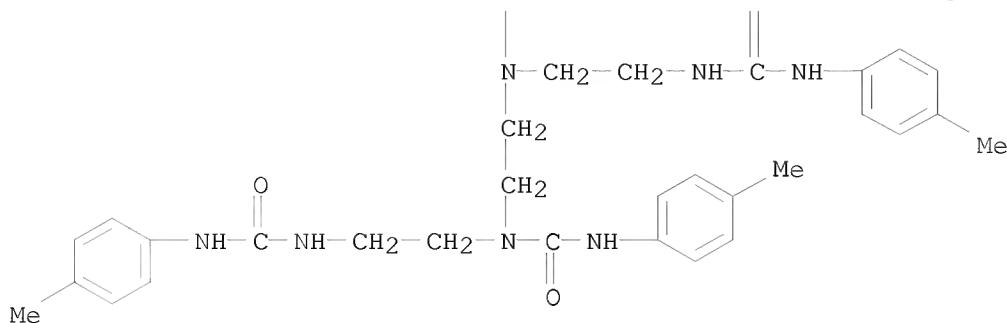


RN 144976-66-9 CAPLUS

CN 2,5,8,11,14,17-Hexazaoctadecanediimide,
N1,N18-bis(4-methylphenyl)-5,14-bis[[(4-methylphenyl)amino]carbonyl]-8,11-
bis[2-[[[(4-methylphenyl)amino]carbonyl]amino]ethyl]- (CA INDEX NAME)

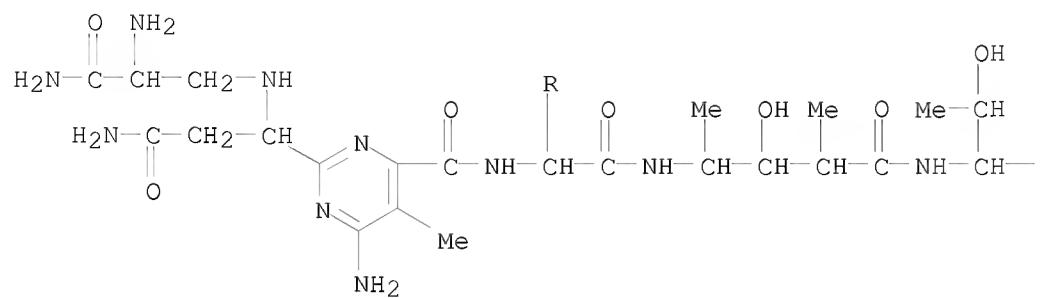
PAGE 1-A



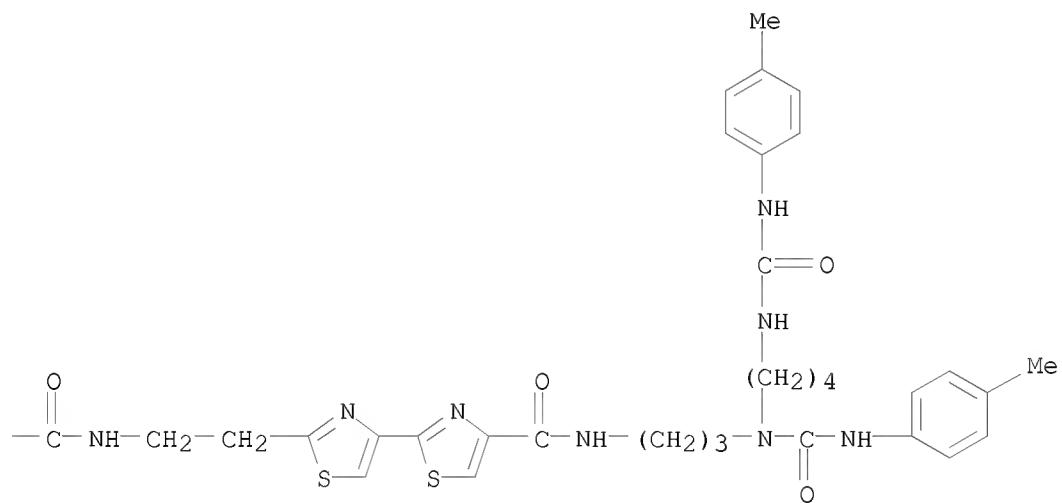


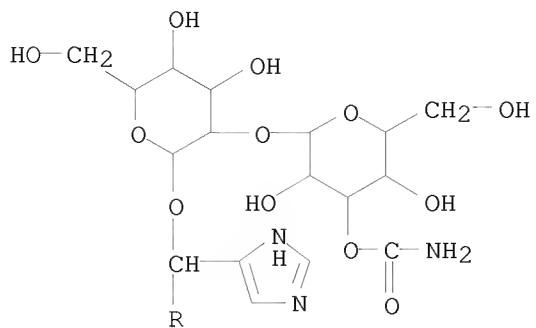
L4 ANSWER 11 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 1993:39373 CAPLUS
 DN 118:39373
 OREF 118:7195a, 7198a
 TI Chemical modification of the antitumor antibiotic bleomycetin by C-end fragment
 AU Andronnikova, G. P.; Lomakina, N. N.; Anisimova, T. M.; Usol'seva, S. V.; Zenkova, V. A.; Anoshina, G. M.; Bychkova, O. P.; Gold'berg, L. E.; Stepanova, E. S.
 CS Urals Polytech. Inst., Ekaterinburg, Russia
 SO Antibiotiki i Khimioterapiya (1992), 37(8), 24-7
 CODEN: ANKHEW; ISSN: 0235-2990
 DT Journal
 LA Russian
 AB Bleomycetin I [R = NH(CH₂)₃NH(CH₂)₄NH₂], an antitumor antibiotic, was modified at the 3-[(4-aminobutyl)amino]propylamine (spermidine) fragment by acylation, carbamoylation, and reductive alkylation to give new semisynthetic derivs. Modifications involved the primary and secondary amino groups and gave N,N'-diacyl, N,N'-dicarbamoyl, and N,N'-dialkyl bleomycetins with lowered antibiotic toxicities.
 IT 144764-23-8P 144764-25-0P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and cytotoxicity of)
 RN 144764-23-8 CAPLUS
 CN Bleomycinamide, N1-[3-[[[(4-methylphenyl)amino]carbonyl][4-[[[(4-methylphenyl)amino]carbonyl]amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)

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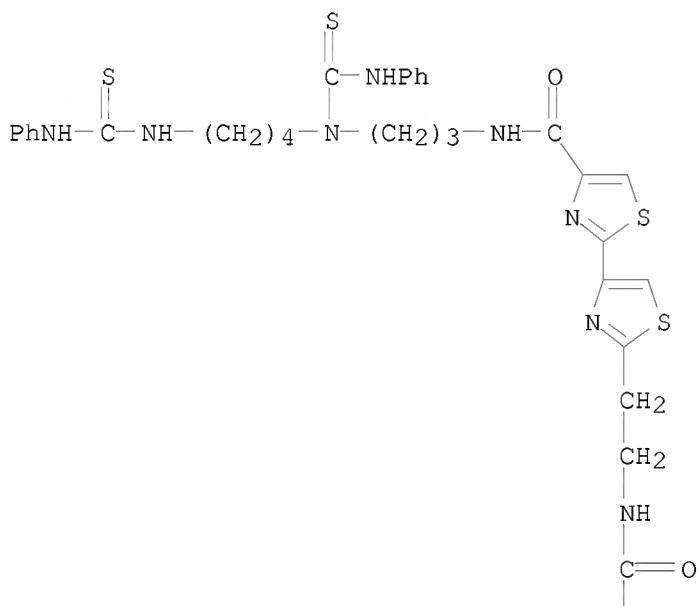
PAGE 1-B

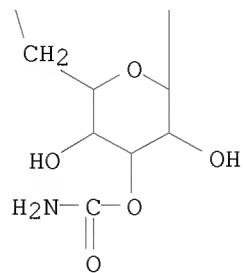
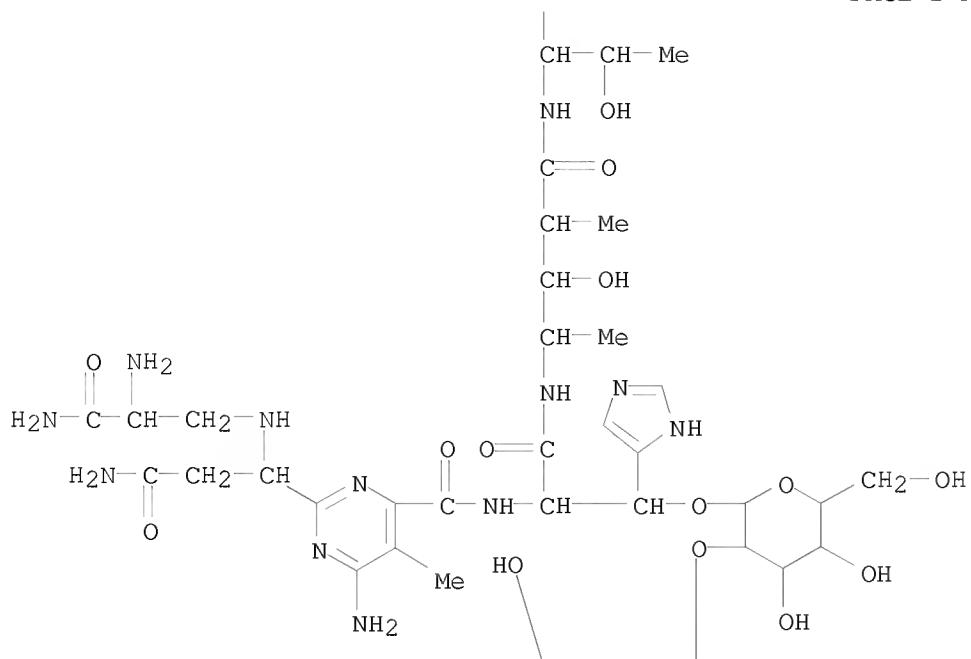




RN 144764-25-0 CAPLUS

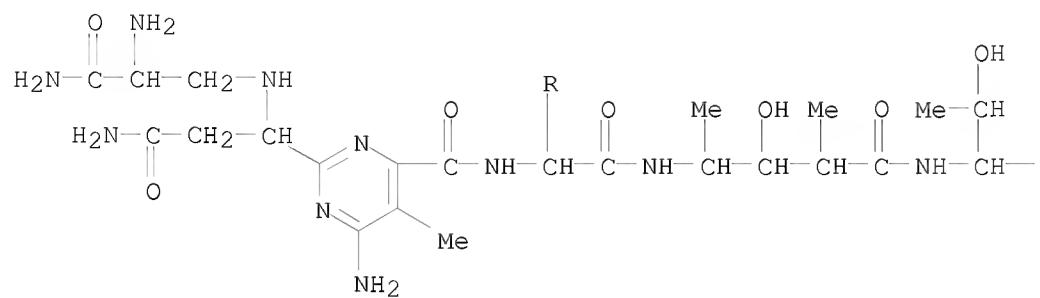
CN Bleomycinamide, N1-[3-[(phenylamino)thioxomethyl][4-[(phenylamino)thioxomethyl]amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)



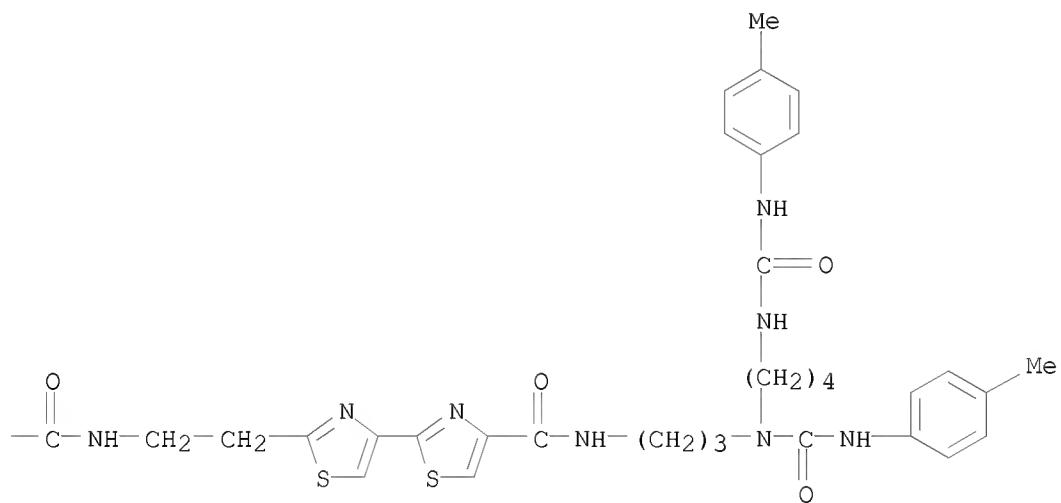


IT 144764-23-8DP, copper complex 144764-25-0DP, copper complex
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and decomplexation of)
 RN 144764-23-8 CAPLUS
 CN Bleomycinamide, N1-[3-[[[(4-methylphenyl)amino]carbonyl][4-[[[(4-methylphenyl)amino]carbonyl]amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)

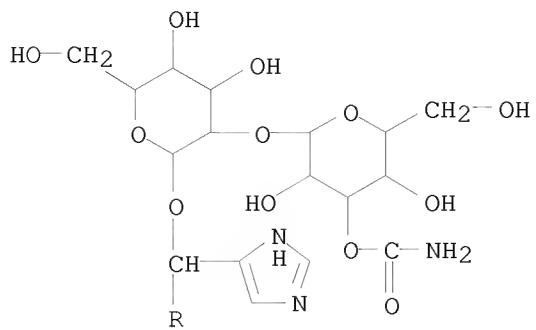
PAGE 1-A



PAGE 1-B



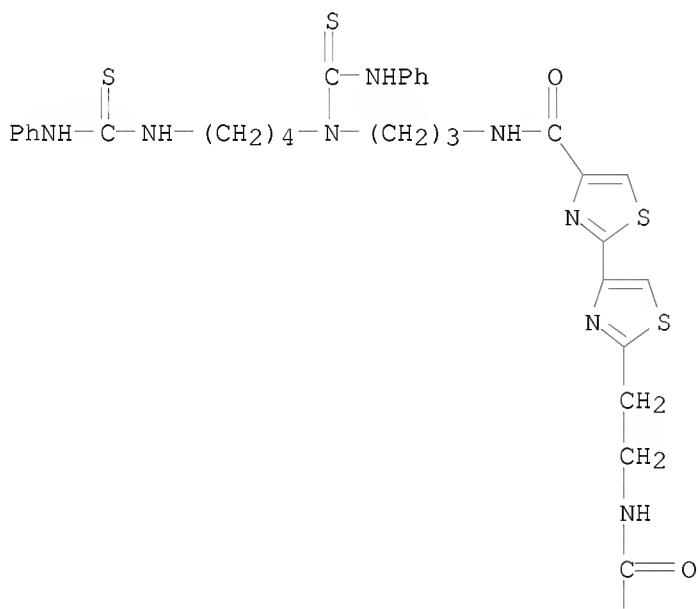
PAGE 2-A

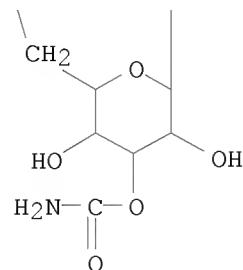
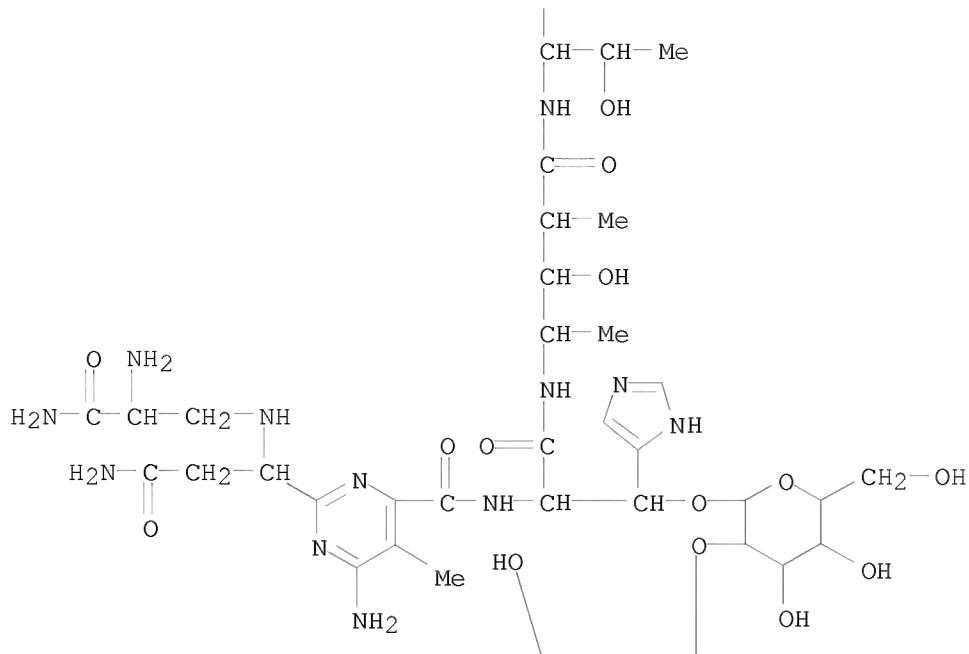


RN 144764-25-0 CAPLUS

CN Bleomycinamide, N1-[3-[(phenylamino)thioxomethyl][4-[(phenylamino)thioxomethyl]amino]butylamino]propyl]- (9CI) (CA INDEX NAME)

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L4 ANSWER 12 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 1990:209795 CAPLUS
 DN 112:209795
 OREF 112:35243a, 35246a
 TI Preparation and copper(II)-complexing property of hexakis(N-phenylcarbamoyl)-(3N-ethylamino)pentaethylenehexamine. A new type of chelating compound
 AU Araki, Takeo; Kubo, Yasuo; Nomura, Yuzo
 CS Dep. Polym. Sci. Eng., Kyoto Inst. Technol., Matsugasaki, 606, Japan
 SO Chemistry Express (1990), 5(1), 17-20
 CODEN: CHEXEU; ISSN: 0911-9566
 DT Journal
 LA English
 AB Hexakis(N-phenylcarbamoyl)(3N-ethylamino)pentaethylenehexamine was prepared from Epomin-SP003 by the reaction with PhNCO and purified by column

chromatog. This singly branched chain compound formed a stable Cu(II) complex in contrast to the case of the linear chain analog. The main component of the starting oligoethylenimine was thus confirmed.

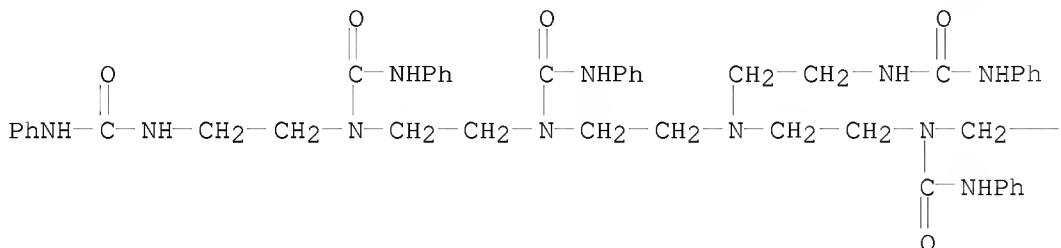
IT 126912-10-5DP, copper complex

RL: PRP (Properties); PREP (Preparation)
(formation and electronic spectrum of)

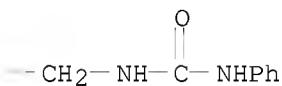
RN 126912-10-5 CAPLUS

CN 2,5,8,11,14,17-Hexazaoctadecane-5,8,14-tricarboxamide,
1,18-dioxo-N5,N8,N14-triphenyl-1,18-bis(phenylamino)-11-[2-
[(phenylamino)carbonyl]amino]ethyl]- (CA INDEX NAME)

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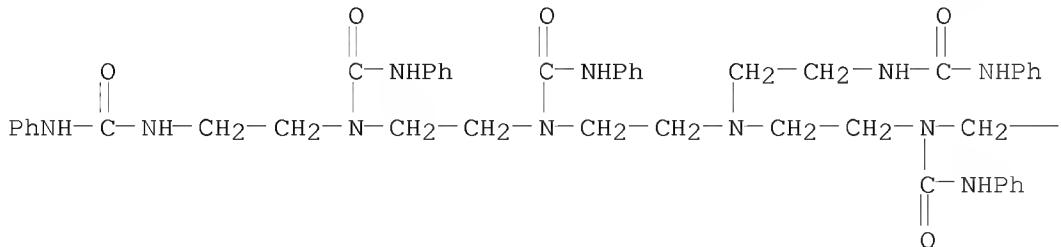
IT 126912-10-5P, Hexakis(N-phenylcarbamoyl)3N-
ethylamino)pentaethylenhexamine

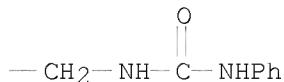
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 126912-10-5 CAPLUS

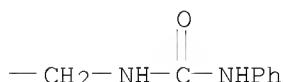
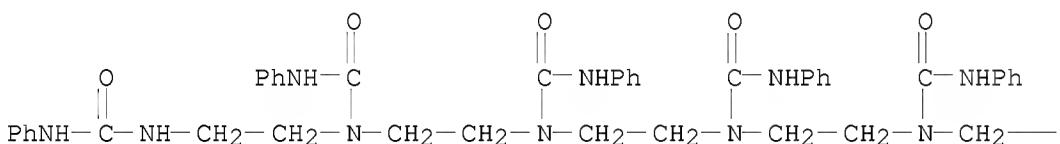
CN 2,5,8,11,14,17-Hexazaoctadecane-5,8,14-tricarboxamide,
1,18-dioxo-N5,N8,N14-triphenyl-1,18-bis(phenylamino)-11-[2-
[(phenylamino)carbonyl]amino]ethyl]- (CA INDEX NAME)

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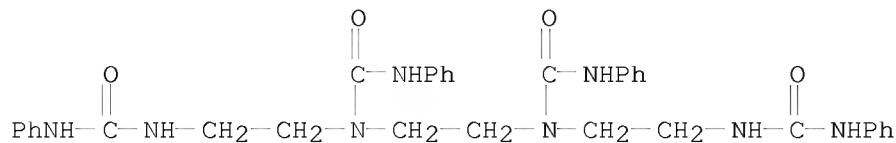


L4 ANSWER 13 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
AN 1990:177900 CAPLUS
DN 112:177900
OREF 112:30073a,30076a
TI Paramagnetic line-broadening of nitrogen-hydrogen signals in hexakis(N-phenylcarbamoyl)pentaethylenehexamine in the presence of copper(II) ions
AU Araki, Takeo; Kubo, Yasuo; Tsuchie, Shoji
CS Dep. Polym. Sci. Eng., Kyoto Inst. Technol., Kyoto, 606, Japan
SO Chemistry Express (1989), 4(11), 705-8
CODEN: CHEXEU; ISSN: 0911-9566
DT Journal
LA English
AB Paramagnetic ¹H-NMR line-broadening of the NH signals in hexakis(N-phenylcarbamoyl)pentaethylenehexamine in the presence of Cu(II) ions indicates that the Cu ions interact more readily with the outer CO-NH groups than with the inner CO-NH groups.
IT 126093-17-2
RL: PRP (Properties)
 (NMR spectrum of, effect of copper ions on)
RN 126093-17-2 CAPLUS
CN 2,5,8,11,14,17-Hexaazaoctadecane-5,8,11,14-tetracarboxamide,
1,18-dioxo-N₅,N₈,N₁₁,N₁₄-tetraphenyl-1,18-bis(phenylamino)- (CA INDEX NAME)

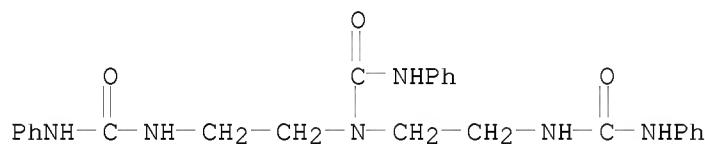


IT 122595-05-5 126552-70-3 126552-71-4
RL: PRP (Properties)
(attempted complexation of, with copper ions)

RN 122595-05-5 CAPLUS
CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-diphenyl-5,8-bis[(phenylamino)carbonyl]- (CA INDEX NAME)

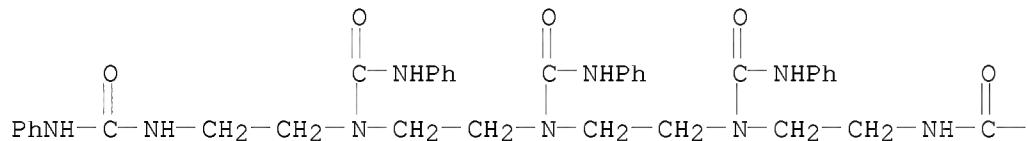


RN 126552-70-3 CAPLUS
CN Urea, N'-phenyl-N,N-bis[2-[(phenylamino)carbonyl]amino]ethyl- (CA INDEX NAME)



RN 126552-71-4 CAPLUS
CN 2,5,8,11,14-Pentaazapentadecanediamide,
N1,N15-diphenyl-5,8,11-tris[(phenylamino)carbonyl]- (CA INDEX NAME)

PAGE 1-A

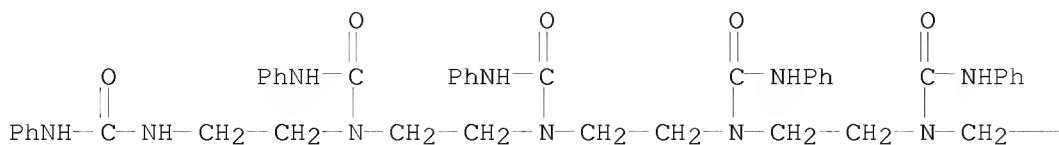


PAGE 1-B

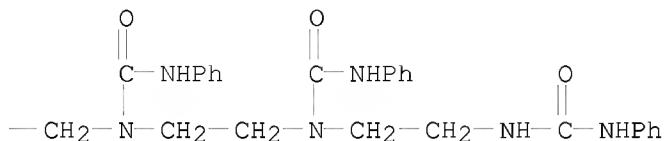
— NHPh

IT 115269-92-6
RL: PRP (Properties)
(complexation of, with copper ions)
RN 115269-92-6 CAPLUS
CN 2,5,8,11,14,17,20,23-Octaazatetracosane-5,8,11,14,17,20-hexacarboxamide,
1,24-dioxo-N5,N8,N11,N14,N17,N20-hexaphenyl-1,24-bis(phenylamino)- (CA INDEX NAME)

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L4 ANSWER 14 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1990:157650 CAPLUS

DN 112:157650

OREF 112:26643a,26646a

TI Nonclassical urea oligomers. XI. Presence of intramolecular hydrogen bonds in hexakis(N-phenylcarbamoyl)pentaethylenehexamine

AU Araki, Takeo; Kubo, Yasuo; Yasuda, Yohko

CS Dep. Polym. Sci. Eng., Kyoto Inst. Technol., Kyoto, 606, Japan

SO Chemistry Express (1989), 4(9), 605-8

CODEN: CHEXEU; ISSN: 0911-9566

DT Journal

LA English

AB The title compound (I) was treated with $\text{CF}_3\text{CH}_2\text{OH}$ and the concentration-dependent

downfield shifts of the NH signals in the NMR spectrum were observed. The inner NH groups are bonded by intramol. H bonds and the outer NH groups contribute to intermol. H bonding; a helical conformation for I is suggested.

IT 126093-17-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

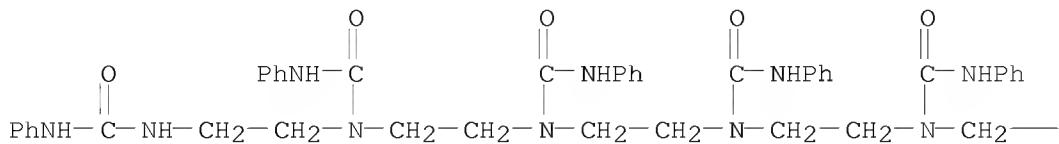
(preparation, NMR, and mol. structure of, hydrogen bonding in relation to)

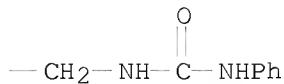
RN 126093-17-2 CAPLUS

CN 2,5,8,11,14,17-Hexaazaoctadecane-5,8,11,14-tetracarboxamide,

1,18-dioxo-N₅,N₈,N₁₁,N₁₄-tetraphenyl-1,18-bis(phenylamino)- (CA INDEX NAME)

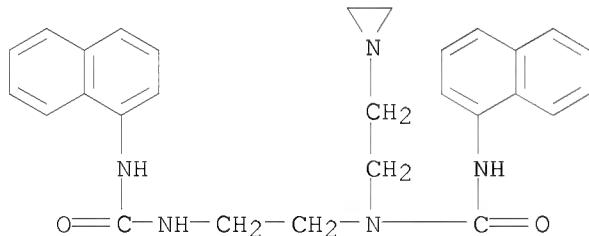
PAGE 1-A





OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

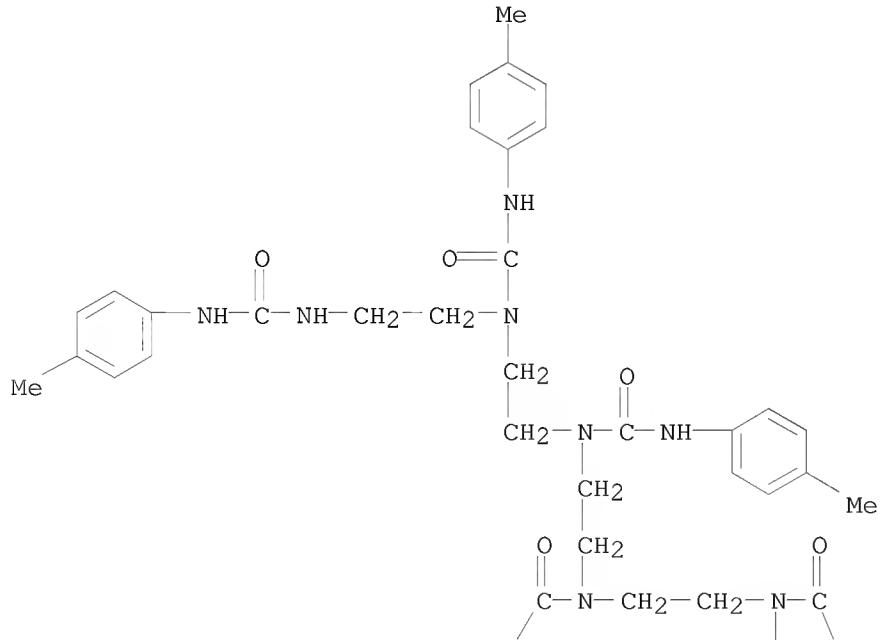
L4 ANSWER 15 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 1989:231353 CAPLUS
 DN 110:231353
 OREF 110:38343a,38346a
 TI Oligomers of aziridines and N-β-aziridinoethylamides
 AU Kostyanovskii, R. G.; Leshchinskaya, V. P.; Alekperov, R. K.; Kadorkina, G. K.; Shustova, L. L.; El'natanov, Yu. I.; Gromova, G. L.; Aliev, A. E.; Chervin, I. I.
 CS Int. Khim. Fiz., Moscow, USSR
 SO Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1988), (11), 2566-75
 CODEN: IASKA6; ISSN: 0002-3353
 DT Journal
 LA Russian
 OS CASREACT 110:231353
 AB Aziridine dimers (e.g., N-acyl derivs. I) were prepared by treating aziridine with esters of strong organic acids, e.g., CF₃CO₂Et, EtO₂CCO₂Et, HCO₂Et, MeCOCH₂CO₂Et. New N-acyl and carbamoyl derivs. of aziridine dimer and trimer were prepared. Linear and branched isomers of aziridine tetramer, and a diastereomeric mixture of 2-methylaziridine dimer were isolated. An efficient regiospecific synthesis of 2,2-dimethylaziridine dimer and trimer was developed.
 IT 120626-70-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 120626-70-2 CAPLUS
 CN Urea, N-[2-(1-aziridinyl)ethyl]-N'-1-naphthalenyl-N-[2-[(1-naphthalenylamino)carbonyl]amino]ethyl- (9CI) (CA INDEX NAME)



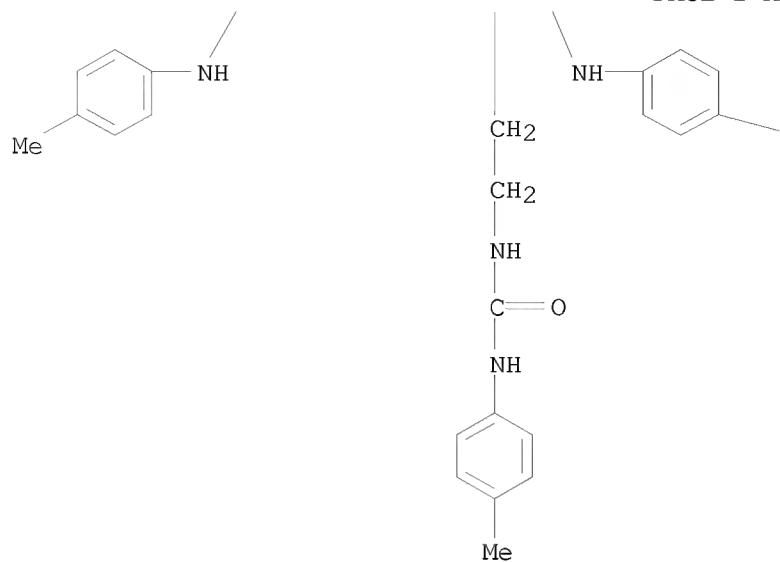
L4 ANSWER 16 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 1988:454269 CAPLUS
 DN 109:54269
 OREF 109:9143a,9146a
 TI Site-selective derivatization of oligoethylenimines using five-membered-ring protection method
 AU Araki, Takeo; Kubo, Yasuo; Gohbara, Shinji; Fujimoto, Tatsuya; Notsu,

CS Akio; Nakahara, Masaru; Isono, Toshihisa; Masuda, Noriko; Fukumoto, Kazumi
 Fac. Sci., Shimane Univ., Matsue, 690, Japan
 SO Macromolecules (1988), 21(7), 1995-2001
 CODEN: MAMOBX; ISSN: 0024-9297
 DT Journal
 LA English
 AB Application of modified Ganem's method was effective for derivatization of oligoethyleneimines (diethylenetriamine, triethylenetetramine, and pentaethylenehexamine) to site-selectively substituted products. The method involves protection of amino groups with aldehydes by formation of five-membered rings, resulting in the remaining unprotected NH groups ready for substitution. Thus, treating H₂N(CH₂)₂NH(CH₂)₂NH₂ with HCHO gave (imidazolidylethyl)amine I. The protective five-membered ring was readily deprotected to recover the amino groups after the necessary substitution reactions were carried out. This protecting method was applied to site-selective thiourea derivatizations and synthesis of completely linear heptaethyleneoctamine.
 IT 115269-94-8P 115269-95-9P 115269-96-0P
 115269-97-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and gel permeation chromatog. of)
 RN 115269-94-8 CAPLUS
 CN 2,5,8,11,14,17-Hexaazaoctadecane-5,8,11,14-tetracarboxamide,
 N₅,N₈,N₁₁,N₁₄-tetrakis(4-methylphenyl)-1,18-bis[(4-methylphenyl)amino]-
 1,18-dioxo- (CA INDEX NAME)

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PAGE 2-A

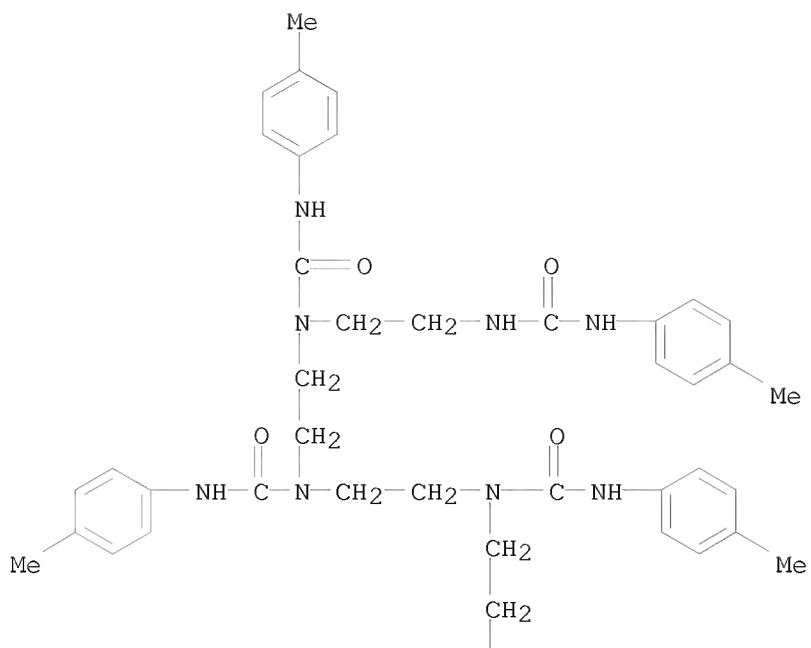


PAGE 2-B

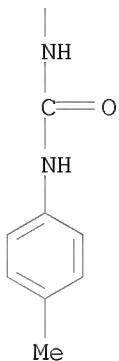
Me

RN 115269-95-9 CAPLUS
CN 2,5,8,11,14-Pentaazapentadecanediamide,
N1,N15-bis(4-methylphenyl)-5,8,11-tris[[(4-methylphenyl)amino]carbonyl]-
(CA INDEX NAME)

PAGE 1-A

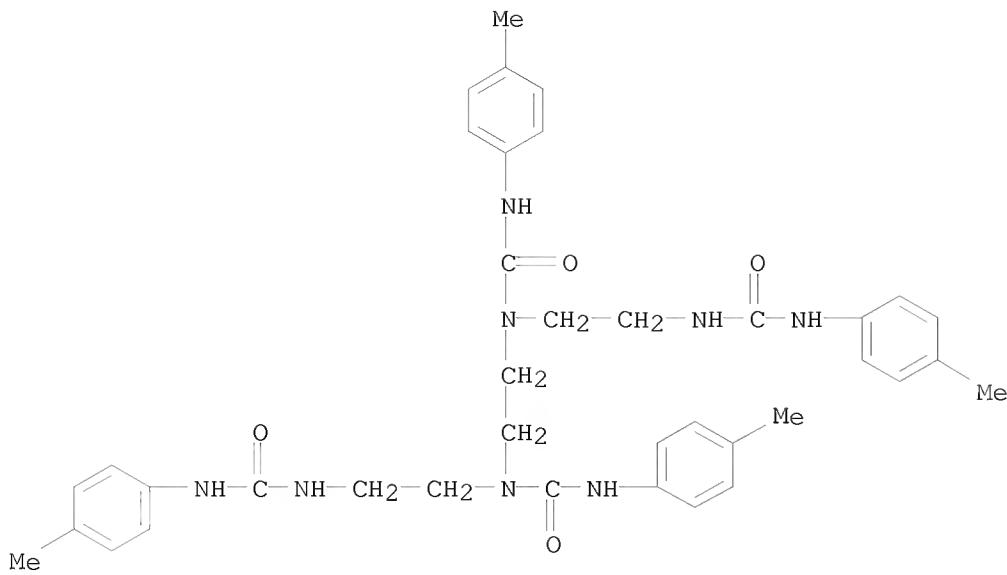


PAGE 2-A



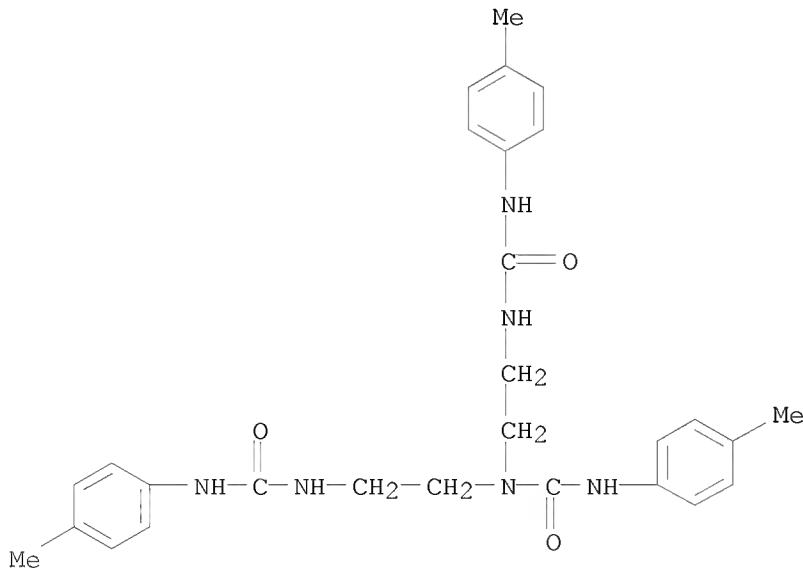
RN 115269-96-0 CAPLUS

CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-bis(4-methylphenyl)-5,8-bis[(4-methylphenyl)amino]carbonyl- (CA INDEX NAME)



RN 115269-97-1 CAPLUS

CN Urea, N'-(4-methylphenyl)-N,N-bis[2-[[(4-methylphenyl)amino]carbonyl]amino]ethyl- (CA INDEX NAME)



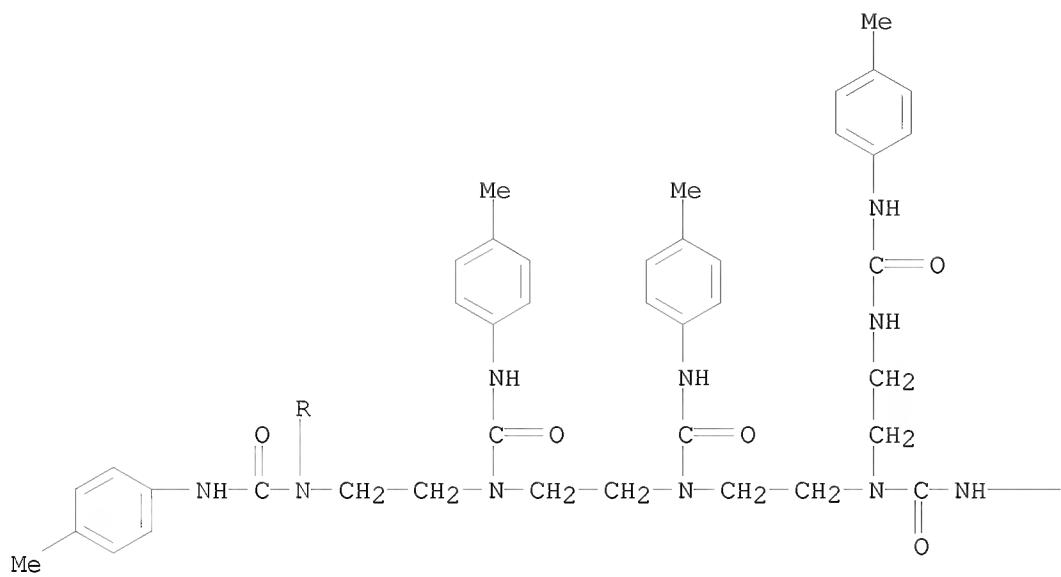
IT 115269-91-5P 115269-92-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

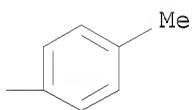
RN 115269-91-5 CAPLUS

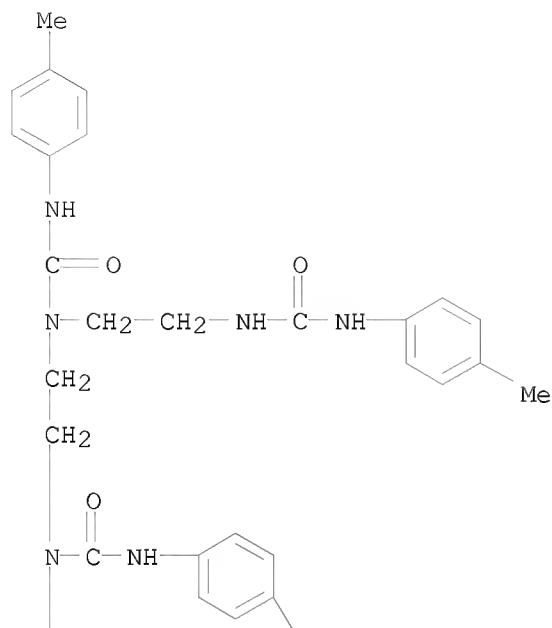
CN 2,5,8,11,14,17,20,23-Octaazatetracosane-5,8,11,14,17,20-hexacarboxamide,
N5,N8,N11,N14,N17,N20-hexakis(4-methylphenyl)-1,24-bis[(4-methylphenyl)amino]-1,24-dioxo- (CA INDEX NAME)

PAGE 1-A

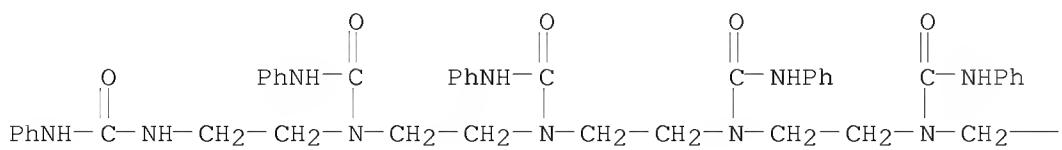


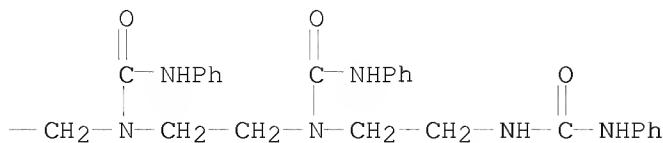
PAGE 1-B





RN 115269-92-6 CAPLUS
 CN 2,5,8,11,14,17,20,23-Octaazatetracosane-5,8,11,14,17,20-hexacarboxamide,
 1,24-dioxo-N5,N8,N11,N14,N17,N20-hexaphenyl-1,24-bis(phenylamino)- (CA
 INDEX NAME)





L4 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1987:455796 CAPLUS

DN 107:55796

OREF 107:9215a,9218a

TI Application of carbon-13 NMR spectroscopy to study the biosynthesis of the quinolizidine alkaloids lupinine and sparteine

AU Rana, Jatinder; Robins, David J.

CS Dep. Chem., Univ. Glasgow, Glasgow, G12 8QQ, UK

SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1986), (6), 1133-7
CODEN: JCPRB4; ISSN: 0300-922X

DT Journal

LA English

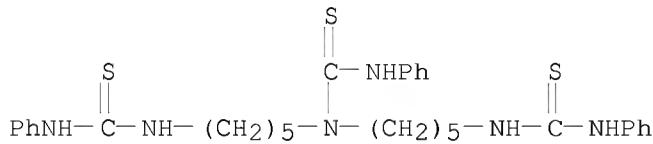
AB The labeling patterns in (-)-sparteine and (-)-lupinine derived biosynthetically in *Lupinus luteus* from [1-amino-15N,1-13C]cadaverine dihydrochloride (I) were established by 13C NMR spectroscopy. Three units of I are incorporated to about the same extent into sparteine, and 2 13C-15N doublets are observed in the 13C{1H} NMR spectrum of sparteine, demonstrating that 2 of these cadaverine units are converted into the outer rings of sparteine in a specific fashion. Two cadaverine units are incorporated into lupinine and 1 13C-15N doublet is observed. These results, and 14C-labeling expts. with 1,7,13-triazatridecane, indicate that a later C5-N-C5 intermediate with C2v symmetry is not involved in lupinine or sparteine biosynthesis.

IT 109314-18-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 109314-18-3 CAPLUS

CN Thiourea, N'-phenyl-N,N-bis[5-[(phenylamino)thioxomethyl]amino]pentyl-
(CA INDEX NAME)



L4 ANSWER 18 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1986:505837 CAPLUS

DN 105:105837

OREF 105:17001a,17004a

TI Recording media

IN Haruta, Masahiro; Matsuda, Hiroshi; Munakata, Hirohide; Nishimura, Yukio

PA Canon K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60192973	A	19851001	JP 1984-47186	19840314
	US 4818665	A	19890404	US 1987-27050	19870323
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				JP 1984-47184	A 19840314
				JP 1984-47185	A 19840314
				JP 1984-47186	A 19840314
				JP 1984-47187	A 19840314
				JP 1984-47188	A 19840314
				US 1985-710686	A1 19850312
		US 5006446	A	19910409	US 1988-221638
			JP 1984-47183	A 19840314	
			JP 1984-47184	A 19840314	
			JP 1984-47185	A 19840314	
			JP 1984-47186	A 19840314	
			JP 1984-47187	A 19840314	
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			US 1985-710686	B1 19850312	
			US 1987-27050	A3 19870323	

PATENT FAMILY INFORMATION:

FAN 1986:234362

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			JP 1984-47186	A 19840314		
			JP 1984-47187	A 19840314		
			JP 1984-47188	A 19840314		
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			US 1987-27050	A3 19870323		

FAN 1986:488730

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PI	JP 60192974	A	19851001	JP 1984-47188	19840314
	US 4818665	A	19890404	US 1987-27050	19870323
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				JP 1984-47186	A 19840314
				JP 1984-47187	A 19840314
				JP 1984-47188	A 19840314

US 5006446	A	19910409	US 1985-710686 US 1988-221638 JP 1984-47183 JP 1984-47184 JP 1984-47185 JP 1984-47186 JP 1984-47187 JP 1984-47188 US 1985-710686 US 1987-27050	A1 19850312 19880720 A 19840314 A 19840314 A 19840314 A 19840314 A 19840314 A 19840314 B1 19850312 A3 19870323
FAN 1986:488731 PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 60192685 US 4818665	A	19851001 19890404	JP 1984-47184 US 1987-27050 JP 1984-47183 JP 1984-47184 JP 1984-47185 JP 1984-47186 JP 1984-47187 JP 1984-47188 US 1985-710686	19840314 19870323 A 19840314 A 19840314 A 19840314 A 19840314 A 19840314 A 19840314 A 19840314 A 19840314
US 5006446	A	19910409	US 1988-221638 JP 1984-47183 JP 1984-47184 JP 1984-47185 JP 1984-47186 JP 1984-47187 JP 1984-47188 US 1985-710686 US 1987-27050	19880720 A 19840314 A 19840314 A 19840314 A 19840314 A 19840314 A 19840314 B1 19850312 A3 19870323
FAN 1986:488732 PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 60192684 JP 04027960 US 4818665	A	19851001 19920513 19890404	JP 1984-47183 US 1987-27050 JP 1984-47183 JP 1984-47184 JP 1984-47185 JP 1984-47186 JP 1984-47187 JP 1984-47188 US 1985-710686	19840314 19870323 A 19840314 A 19840314 A 19840314 A 19840314 A 19840314 A 19840314 A 19840314 A 19840314
US 5006446	A	19910409	US 1988-221638 JP 1984-47183 JP 1984-47184 JP 1984-47185 JP 1984-47186 JP 1984-47187 JP 1984-47188 US 1985-710686 US 1987-27050	19880720 A 19840314 A 19840314 A 19840314 A 19840314 A 19840314 A 19840314 B1 19850312 A3 19870323
FAN 1986:505898 PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 60192977 US 4818665	A	19851001 19890404	JP 1984-47187 US 1987-27050	19840314 19870323

US 5006446	A	19910409	JP 1984-47183	A 19840314
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			JP 1984-47184	A 19840314
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			JP 1984-47186	A 19840314
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			US 1987-27050	A3 19870323

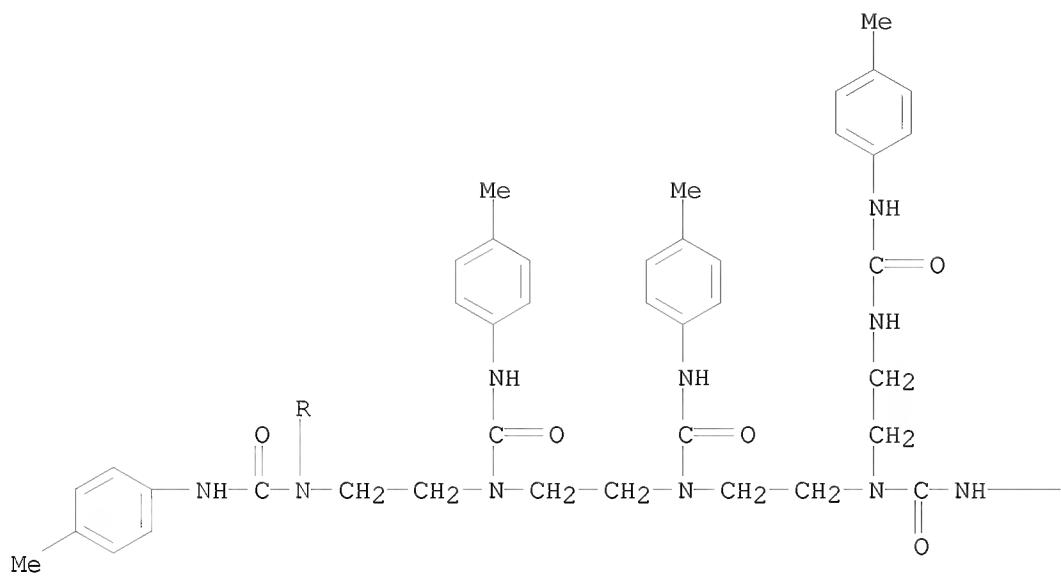
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Recording media have a support and monomol. layers of a metal chelate and a free ligand stacked together singly or multiply or stacked monomol. layers of a mixture of the metal chelate and the free ligand. The media have high sensitivity to applied energy signals and give images with high resolution Thus, a CHCl₃ solution of a 1:1 mixture of ligand I and chelate II (1 mM concentration each) was spread on a 0.1 mM CdCl₂ solution to form a mixed monomol. layer and transferred onto a glass plate. The process was repeated until 5 stacked monomol. layers were formed. Patternwise exposure of the material to UV light produced a red-purple image having a resolution of 1000 lines/mm.

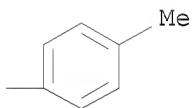
IT 103781-94-8
 RL: USES (Uses)
 (photosensitive monomol. layers of metal chelate and, for optical recording materials and photoimaging compns.)

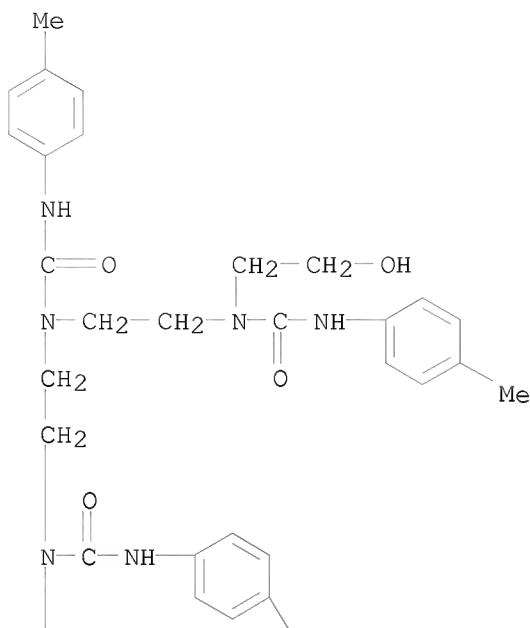
RN 103781-94-8 CAPLUS
 CN 2,5,8,11,14,17,20,23-Octaazatetracosane-5,8,11,14,17,20-hexacarboxamide, 2-(2-hydroxyethyl)-N5,N8,N11,N14,N17,N20-hexakis(4-methylphenyl)-1,24-bis[(4-methylphenyl)amino]-1,24-dioxo- (CA INDEX NAME)

PAGE 1-A



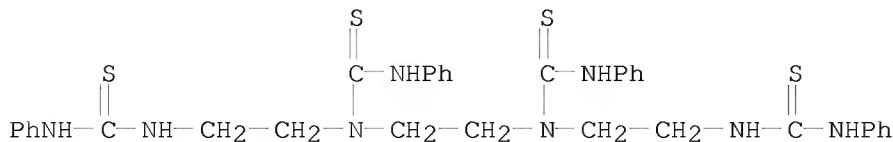
PAGE 1-B



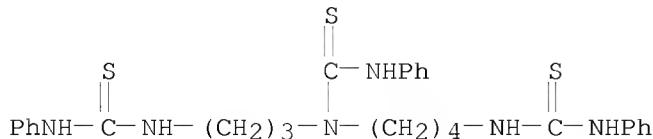


L4 ANSWER 19 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 1984:102457 CAPLUS
 DN 100:102457
 OREF 100:15549a,15552a
 TI Catalytic properties of synthetic linear oligomer-copper complexes in autoxidation of phenols
 AU Tsukube, Hiroshi; Maruyama, Kazuhiro; Araki, Takeo
 CS Dep. Chem., Okayama Univ., Okayama, 700, Japan
 SO Journal of the Chemical Society, Perkin Transactions 2: Physical Organic Chemistry (1972-1999) (1983), (10), 1485-90
 CODEN: JCPKBF; ISSN: 0300-9580
 DT Journal
 LA English
 AB The catalytic properties of Cu complexes of intermediate-sized ligands in the autoxidn. of phenols were examined. Complexes of CuCl₂ with [CH₂CH₂N(CONHPh)]₈, [CH₂CH₂N(CONHBu)]_n and [CH₂CH₂N(CSNHPh)]₈ were effective catalysts for the autoxidn. of 2,6-xylenol, giving high reaction rates and good coupling selectivity.
 IT 88936-58-7D, copper complexes
 RL: CAT (Catalyst use); USES (Uses)

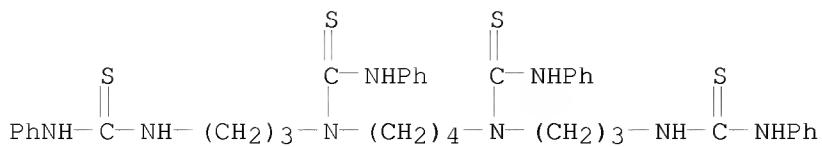
(catalysts, for autoxidn. of phenols)
 RN 88936-58-7 CAPLUS
 CN 2,5,8,11-Tetraazadodecanedithioamide,
 N1,N12-diphenyl-5,8-bis[(phenylamino)thioxomethyl]- (CA INDEX NAME)



L4 ANSWER 20 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 1982:118451 CAPLUS
 DN 96:118451
 OREF 96:19398h, 19399a
 TI Isolation, separation, and analysis of polyamines via their N-phenylaminothiocarbonyl derivatives
 AU Golding, Bernard T.; Nassereddin, Ishaq K.
 CS Dep. Chem. Mol. Sci., University of Warwick, Coventry, CV4 7AL, UK
 SO Journal of Chemical Research, Synopses (1981), (11), 342
 CODEN: JRPSDC; ISSN: 0308-2342
 DT Journal
 LA English
 AB Polyamines react rapidly with PhNCS in aqueous EtOH to form fully blocked N-phenylaminothiocarbonyl derivs. These derivs. are suitable for chromatog. separation and NMR spectroscopic anal. E.g., cells were obtained from an Escherichia coli culture, washed with aqueous NaCl and KCl, and extracted with aqueous TCA. The extract was filtered, extracted with Et2O, and the aqueous layer kept. The pH of the aqueous layer was adjusted to 9 with aqueous Na2CO3; PhNCS in EtOH was added, and the mixture stirred 1 h at room temperature Extraction with CH2Cl2 gave a residue containing mainly the phenylaminothiocarbonyl derivs. of putrescine and spermidine, which were separated by preparative TLC.
 IT 81065-67-0P 81065-68-1P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and NMR of)
 RN 81065-67-0 CAPLUS
 CN Thiourea, N'-phenyl-N-[4-[[[phenylamino)thioxomethyl]amino]butyl]-N-[3-[[[phenylamino)thioxomethyl]amino]propyl]- (CA INDEX NAME)



RN 81065-68-1 CAPLUS
 CN 2,6,11,15-Tetraazahexadecanedithioamide,
 N1,N16-diphenyl-6,11-bis[(phenylamino)thioxomethyl]- (CA INDEX NAME)



L4 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1981:527566 CAPLUS

DN 95:127566

OREF 95:21291a, 21294a

TI Highly selective membrane transport of copper(II) ion by synthetic linear oligomer carriers

AU Maruyama, Kazuhiro; Tsukube, Hiroshi; Araki, Takeo

CS Dep. Chem., Kyoto Univ., Kyoto, 606, Japan

SO Journal of the Chemical Society, Dalton Transactions: Inorganic Chemistry (1972-1999) (1981), (7), 1486-91

CODEN: JCDTBI; ISSN: 0300-9246

DT Journal

LA English

AB A new class of synthetic linear oligomeric carriers having urea or thiourea units exts. and transports transition metal ions with high selectivity. The rates and specificities in this transport system are dependent on the carrier structure, the nature of the cotransported anions, and other additives. The best carrier, the urea-containing oligomer [CH₂CH₂N(CONHPh)]₈, shows completely selective transport of Cu²⁺ through a CH₂Cl₂ liquid membrane between aqueous phases, and is thus a chemical analog of biol. Cu transport.

IT 74010-59-6

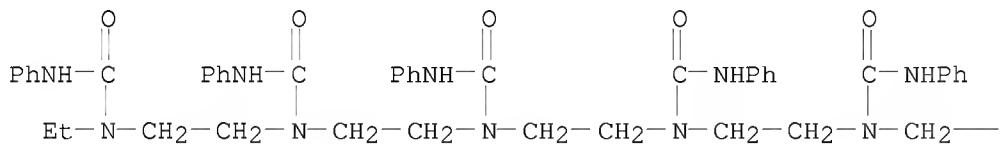
RL: BIOL (Biological study)

(metal ion transport by, through liquid membrane)

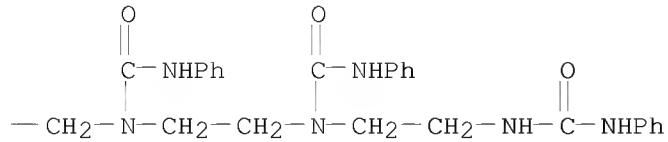
RN 74010-59-6 CAPLUS

CN 2,5,8,11,14,17,20,23-Octaaazatetracosane-5,8,11,14,17,20-hexacarboxamide,
2-ethyl-1,24-dioxo-N5,N8,N11,N14,N17,N20-hexaphenyl-1,24-bis(phenylamino)-
(CA INDEX NAME)

PAGE 1-A



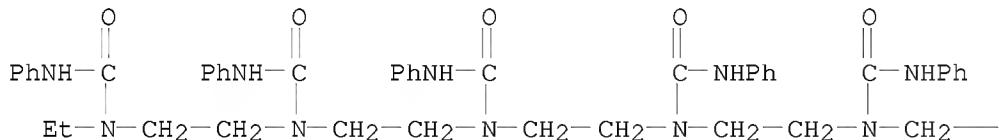
PAGE 1-B



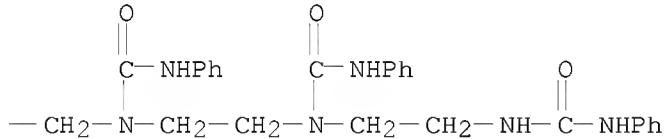
OSC.G 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L4 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
AN 1981:132566 CAPLUS
DN 94:132566
OREF 94:21563a,21566a
TI An artificial oligomer carrier for transport of organic substrates
AU Maruyama, Kazuhiro; Tsukube, Hiroshi; Araki, Takeo
CS Dep. Chem., Kyoto Univ., Kyoto, 606, Japan
SO Journal of the Chemical Society, Chemical Communications (1980), (24),
1222-4
CODEN: JCCCAT; ISSN: 0022-4936
DT Journal
LA English
AB A new type of lipophilic host oligomer H[CH₂CH₂N(CONHPh)]₈H (I), prepared by ring-opening oligomerization of 1-(N-phenylcarbamoyl)aziridine, efficiently transported biol. important adenine, amino acid, and catechol amine salts as well as simple amine derivs. through artificial membranes. The extraction and transport of organic cation salts by I was compared with dibenzo-18-crown-6 (II). I showed a high specificity towards aromatic amines whereas II extracted and transported both aliphatic and aromatic amines.
IT 74010-59-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, and organic cation salt extraction and transport by)
RN 74010-59-6 CAPLUS
CN 2,5,8,11,14,17,20,23-Octaazatetracosane-5,8,11,14,17,20-hexacarboxamide,
2-ethyl-1,24-dioxo-N₅,N₈,N₁₁,N₁₄,N₁₇,N₂₀-hexaphenyl-1,24-bis(phenylamino)-
(CA INDEX NAME)

PAGE 1-A



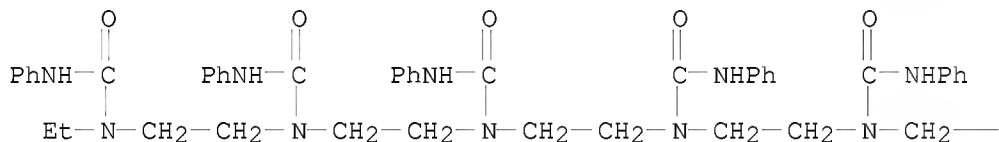
PAGE 1-B



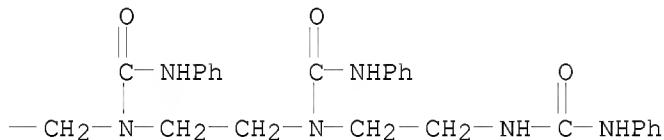
L4 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
AN 1980:421127 CAPLUS
DN 93:21127
OREF 93:3543a,3546a
TI New membrane carrier for selective transport of metal ions
AU Maruyama, Kazuhiro; Tsukube, Hiroshi; Araki, Takeo
CS Fac. Sci., Kyoto Univ., Kyoto, 606, Japan
SO Journal of the American Chemical Society (1980), 102(9), 3246-7

DT CODEN: JACSAT; ISSN: 0002-7863
 Journal
 LA English
 AB A selective membrane system containing a new class of synthetic oligomers, I, II, and III, as mobile carriers is described. This membrane system transported Cu (II) with excellent selectivity and high efficiency, and provided a chemical analog to biol. facilitated transport.
 IT 74010-59-6 74010-60-9
 RL: BIOL (Biological study)
 (as membrane carrier, for cation transport)
 RN 74010-59-6 CAPLUS
 CN 2,5,8,11,14,17,20,23-Octaazatetracosane-5,8,11,14,17,20-hexacarboxamide,
 2-ethyl-1,24-dioxo-N5,N8,N11,N14,N17,N20-hexamphenyl-1,24-bis(phenylamino)-
 (CA INDEX NAME)

PAGE 1-A

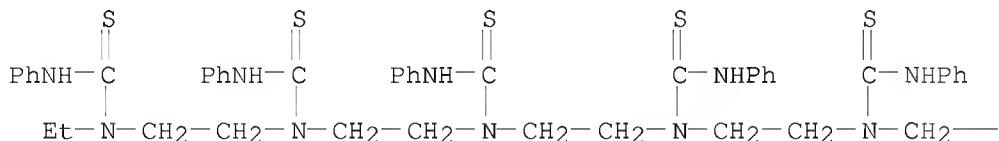


PAGE 1-B

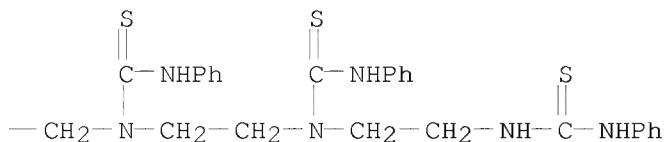


RN 74010-60-9 CAPLUS
 CN 2,5,8,11,14,17,20,23-Octaazapentacosane-5,8,11,14,17,20,23-
 heptacarbothioamide, N,N',N'',N''',N'''',N''''',N'''''-heptaphenyl-1-
 (phenylamino)-1-thioxo- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L4 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1976:45964 CAPLUS

DN 84:45964

OREF 84:7553a, 7556a

TI Polythioureas to inhibit ozone fading of dyed polyamides

IN Wells, Rodney Lee; Lofquist, Robert A.; Lazarus, Stanley D.

PA Allied Chemical Corp., USA

SO U.S., 7 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 3917449	A	19751104	US 1974-441595 US 1974-441595	19740211 19740211

AB Ozone [57898-00-7] fading of polyamide fibers dyed with disperse or cationic dyes was reduced by coating the fibers with polythioureas prepared by treating alkyl isothiocyanates with primary or secondary amines or polyamines such as dimer diamine. Thus, nylon 6 yarn was knitted into sleeves which were sprayed with D(NHHCSNHCH₂H:CH₂)₂ (D is a C₃₆ hydrocarbon residue of a dimer acid) to provide 1.1% add-on and dyed with C. I. Disperse Yellow 3 and C. I. Disperse Blue 7. When the dyed sleeves were exposed to 3 cycles of O₃ in an atmospheric containing 0.2 ppm O₃ at 104°F and relative humidity .apprx.90%, the fading was much smaller than that of a control containing no polythiourea. The lightfastness, determined

by exposure to a xenon lamp at 145°, was 60 hr compared to 40 hr for the untreated control.

IT 57898-07-4

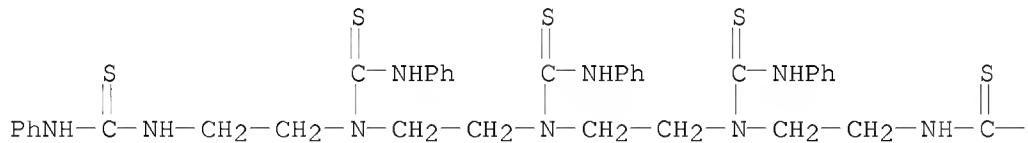
RL: USES (Uses)

(ozone fading prevention by, of cationic and disperse dyes on polyamide fibers)

RN 57898-07-4 CAPLUS

CN 2,5,8,11,14-Pentaazapentadecanedithioamide,
N1,N15-diphenyl-5,8,11-tris[(phenylamino)thioxomethyl]- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

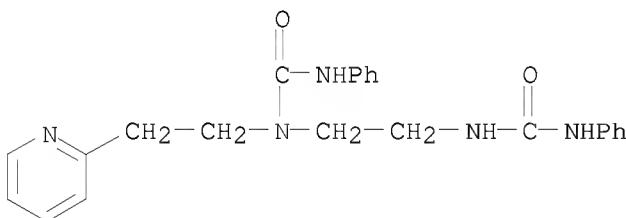
— NHPH

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

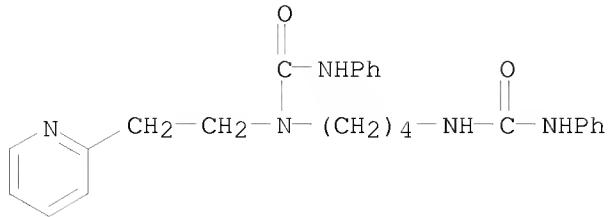
L4 ANSWER 25 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
AN 1963:448249 CAPLUS
DN 59:48249
OREF 59:8696b-h,8697a-f
TI Reactions of 2-vinylpyridine with aliphatic diamines
AU Profft, Elmar; Lojack, Siegfried
CS Tech. Coll. Chem., Leuna-Merseburg, Germany
SO Rev. Chim., Acad. Rep. Populaire Roumaine (1962), 7(1), 405-29
DT Journal
LA German
AB The reactions between 2-vinylpyridine (Ia) and 4 aliphatic diamines, ethylene-, tetramethylene-, hexamethylene-, and octamethylenediamine, were studied, and the expected mono-, di-, tri-, and tetra-addition compds. obtained. The best operating conditions were obtained for each product; paper-chromatographic separation [Patridge mixture (40:10:50 BuOH-AcOH-H₂O, pH 2.9) as ascending agent, 0.2% ninhydrin in BuOH as developing agent] has enabled insight into the reaction mechanism and course. It was determined that generally the mono- and di-addition products were best prepared in C₆H₆ with AcOH or EtCO₂H as catalyst, while the tri- and tetra-addition compds. were formed at high temps. and long reaction times, with the same catalysts. These new amines were examined for their structure by conversion with ethylene oxide to aminoalcs., by cyclization to morpholines, by reaction with acrylonitrile to cyanoethyl compds., by ketenization, and some other measures. Diazotization of N,N-bis[2-(2-pyridyl)ethyl]ethylenediamine has proven that the reaction between diamines and 2 moles Ia takes place by addition at the N,N-position. The following compds. were obtained [% yield, b.p./mm., n_{20D} given], all (unless otherwise stated) being liquids, soluble in water, EtOH, and ether]: N-[2-(2-pyridyl)ethyl]ethylenediamine, 29.1, 77°/0.01, 1.5382; N-[2-(2-pyridyl)ethyl]-N-acetylethylenediamine, 43.3, 108°/0.003, 1.5463; N-[2-(2-pyridyl)ethyl]-N,N'-diacetylethylenediamine, 45.8, 136°/0.003, 1.5496; N-[2-(2-pyridyl)ethyl]-N'-(β-hydroxyethyl)ethylenediamine, 50, 110°/0.003, 1.5342, N-[2-(2-pyridyl)ethyl]-N',N'-bis(β-hydroxyethyl)ethylenediamine, 73, 138°/0.01, 1.5265; N-2-[β-(2-pyridyl)ethylamino]-1-morpholinoethane, 43.5, 75-80°/15, 1.5140; N-[2-(2-pyridyl)ethyl-N,N',N'-tris(β-hydroxyethyl)ethylenediamine, 41, 172°/0.01, 1.5123; N-[2-(2-pyridyl)ethyl]-N-(dichloroacetyl)-N,N'-bis(dichloroacetoxyethyl)ethylenediamine, 21, - (yellow, m. 170°), -, N-[2-(2-pyridyl)ethyl]-β-benzoyloxyethylamine, 38, - (m. 152°); N-2-(2-pyridyl)ethyl-N,N'-bis(octylsulfonyl)ethylenediamine, 84, - (m. 77°), -; N-[2-(2-pyridyl)ethyl]-N,N',N'-tris(butylsulfonyl)ethylenediamine, 72, - (decomposed 270°), -; N-[2-(2-pyridyl)ethyl]-N,N'-dicarbanilidoethylenediamine, 81, - (m. 138°), -; N-[2-(2-pyridyl)ethyl]-N'-butylethylenediamine, 22, 69°/0.001, 1.5075; N-[2-(2-pyridyl)ethyl]tetramethylenediamine, 43.6, 83°/0.01, 1.5268; N-[2-(2-pyridyl)ethyl]-N'-acetyltetramethylenediamine, 41, 108°/0.001, 1.5205; N-[2-(2-pyridyl)ethyl]-N,N'-diacetyltetramethylenediamine, 44, 138°/0.001, 1.5262; N-[2-(2-pyridyl)ethyl]-N'-(β-hydroxyethyl)tetramethylenediamine, 45.4, 120°/0.01, 1.5220; N-[2-(2-pyridyl)ethyl]-N,N-bis(β-hydroxyethyl)tetramethylenediamine, 73.9, 150°/0.01, 1.5187; 1-[β-(2-pyridyl)ethylamino]-4-morpholinobutane, 32, 100°/1, 1.5096; N-[2-(2-pyridyl)ethyl]-N,N,N-tris(β-hydroxyethyl)tetramethylenediamine, 30, 175°/-, 1.5047;

N-[2-(2-pyridyl)ethyl]-N,N'-dicarbanilidotetramethylenediamine, 94.2, -
(m. 156°), -; N-[2-(2-pyridyl)ethyl]hexamethylenediamine (I), 45.3,
91-3°/0.002, 1.5160; N-[2-(2-pyri-
dyl)ethyl]-N'-acetylhexamethylenediamine, 38.2, 118°/0.002 1.5038
(insol. in water); N-[2-(2-pyridyl)ethyl]-N,N'-
diacetylhexamethylenediamine, 43.4, 143°/0.002, 1.5192 (insol. in
water); N-[2-(2-pyridyl)ethyl]-N,N',N'-triacetylhexamethylenediamine,
37.7, 205°/0.02, 1.5230 (no solubility given);
N-[2-(2-pyridyl)ethyl]-N'-(β-hydroxyethyl)hexamethylenediamine, 47,
125°/0.01, 1.5168 (no solubility given);
N-[2-(2-pyridyl)ethyl]N',N'-bis(β-hydroxyethyl)hexamethylenediamine,
50, 166-8°/0.004, 1.5101;
1-[β-(2-pyridyl)ethylamino]-1-6-N-morpholino-n-hexane, 32,
110°/1, 1.5026 (no solubility given);
N-[2-(2-pyridyl)ethyl]-N,N',N'-tris(β-
hydroxyethyl)hexamethylenediamine, 60, 186°/0.01, 1.5000;
N-[2-(2-pyridyl)ethyl]octamethylenediamine, 46.8, 113°/0.002,
1.5100; N-[2-(2-pyridyl)ethyl]-N'-acetyloctamethylenediamine, 40,
125°/0.001, 1.5027 (no solubility given);
N-[2-(2-pyridyl)ethyl]-N,N'-diacetyloctamethylenediamine, 37,
165°/0.002, 1.5126; N-[2-(2-pyridyl)ethyl]-N,N',N'-
triacetyloctamethylenediamine, 61, 208°/0.001, 1.5216 (no solubility
given); N-[2-(2-pyridyl)ethyl]-N'-(β-
hydroxyethyl)octamethylenediamine, 49, 126°/0.001, 1.5023;
N-[2-(2-pyridyl)ethyl]-N,N'-bis(β-hydroxyethyl)octamethylenediamine,
40.4, 172°/0.02, 1.5158; N,N-bis[2-(2-
pyridyl)ethyl]ethylenediamine, 4.7, 120°/0.004, 1.5426 (no solubility
given); N,N-bis[2-(2-pyridyl)ethyl]-N'-acetylethylenediamine, 37,
138-40°/0.003, 1.5464 (insol. in water);
N,N-bis[2-(2-pyridyl)ethyl]-N,N'-diacetylethylenediamine, 25,
156°/0.003, 1.5410 (no solubility given);
N,N-bis[2-(2-pyridyl)ethyl]-N-(2-benzoyloxyethyl)amine, 32.5, - (m.
172°), -; N,N-bis[2-(2-pyridyl)ethyl] tetramethylenediamine, 1.76,
128°/0.001, 1.5368; N,N-bis[2-(2-
pyridyl)ethyl]hexamethylenediamine, 14.3, 136°/0.002, 1.5216;
N,N-bis[2-(2-pyridyl)ethyl]-N'-acetylhexamethylenediamine, 31,
143°/0.001, 1.5142; N,N-bis[2-(2-pyridyl)ethyl]-N',N'-
diacetylhexamethylenediamine, 25, 163°/0.002, 1.5236;
N,N-bis[2-(2-piperidyl)ethyl]hexamethylenediamine, 68.3,
136°/0.002, 1.5216; N,N-bis[2-(2-pyridyl)ethyl]bis(β-
hydroxyethyl)hexamethylenediamine, 53, 160°/0.005, 1.5074,
N,N-bis[2-(2-pyridyl)ethyl]octamethylenediamine, 13.6, 148°/0.001,
1.5246; N,N,N'-tris[2-(2-pyridyl)ethyl]ethylenediamine, 27.4,
148°/0.01, 1.5544; N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-
acetylethylenediamine, 58.8, 180°/0.01, 1.5361 (no solubility given);
N,N,N'-tris[2-(2-pyridyl)ethyl]-N'ethoxymethylethylenediamine, 13.9,
90-5°/0.02, 1.5563; N-[2-(2-pyridyl)ethyl]-N,N'-bis[β-(2-
pyridyl)-γ-hydroxypropyl]-N'-ethoxymethylethylenediamine, 56.3,
168°/0.001, 1.5642 (no solubility given);
N-[2-(2-pyridyl)ethyl]-N,N'-bis[β-(2-pyridyl)allyl]-N'-
ethoxymethylethylenediamine, 43.2, -, 1.5667 (no solubility given);
N,N,N'-tris[2-(2-pyridyl)-β,β-bis(hydroxymethyl)ethyl]-N'-
ethoxymethylethylenediamine, 70.5, -, 1.5720 (no solubility given);
N,N,N'-tris[2-(2-pyridyl)ethyl]tetramethylenediamine, 26.6,
156°/0.001, 1.5487; N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-
acetyltetramethylenediamine, 78, 162°/0.001, 1.5316;
N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-(β-
cyanoethyl)tetramethylenediamine, 61.7, 158°/0.02, 1.5318;

N,N,N'-tris[2-(2-pyridyl)ethyl]hexamethylenediamine, 27.1,
163°/0.001, 1.5340; N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-
acetylhexamethylenediamine, 86.3, 175°/0.005, 1.5348;
N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-(β-
hydroxyethyl)hexamethylenediamine, 72, 139°/0.001, 1.5191;
N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-(cyanoethyl)hexamethylenediamine, 53.5,
193°/0.08, 1.5020 (no solubility given);
N,N,N'-tris[2-(2-pyridyl)ethyl]-N-(γ-
aminopropyl)hexamethylenediamine, 79.5, 152°/0.002, 1.5175 (no
solubility given); N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-(2-
carbamoylethyl)hexamethylenediamine, 39, - (m. 342°), -;
N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-carbanilidohexamethylenediamine, 79, -
(m. 134°), -; N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-
(thiocarbanilido)hexamethylenediamine, 68.6, - (m. 85°), -;
N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-propen-2-ylhexamethylenediamine, 18.3,
95-100°/0.001, 1.5118 (no solubility given);
N,N,N'-tris[2-(2-pyridyl)ethyl]octamethylenediamine, 52.9,
185°/0.001, 1.5380 (no solubility given);
N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-acetyloctamethylenediamine, 59.4,
193°/0.001, 1.5219 (no solubility given);
N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-(β-
cyanoethyl)octamethylenediamine, 66.4, 162°/0.02, 1.5073;
N,N,N',N'-tetrakis[2-(2-pyridyl)ethyl]ethylenediamine, 5,
183°/0.01, 1.5616 (no solubility given);
N,N,N',N'-tetrakis[2-(2-pyridyl)ethyl]tetramethylenediamine, 2,
183-5°/0.001, 1.5546 (no solubility given);
N,N,N',N'-tetrakis[2-(2-pyridyl)ethyl] hexamethylenediamine, 2.8,
220°/0.02, 1.5452 (no solubility given);
N,N,N',N'-tetrakis[2-(2-pyridyl)ethyl]octamethylenediamine, 2.55,
225°/0.001, 1.5463 (no solubility given).
IT 102218-88-2P, Urea, 1-[2-(2-pyridyl)ethyl]-1,1'-ethylenebis[3-
phenyl- 103734-40-3P, Urea,
1-[2-(2-pyridyl)ethyl]-1,1'-tetramethylenebis[3-phenyl-
RL: PREP (Preparation)
(preparation of)
RN 102218-88-2 CAPLUS
CN Urea, 1-[2-(2-pyridyl)ethyl]-1,1'-ethylenebis[3-phenyl- (7CI) (CA INDEX
NAME)

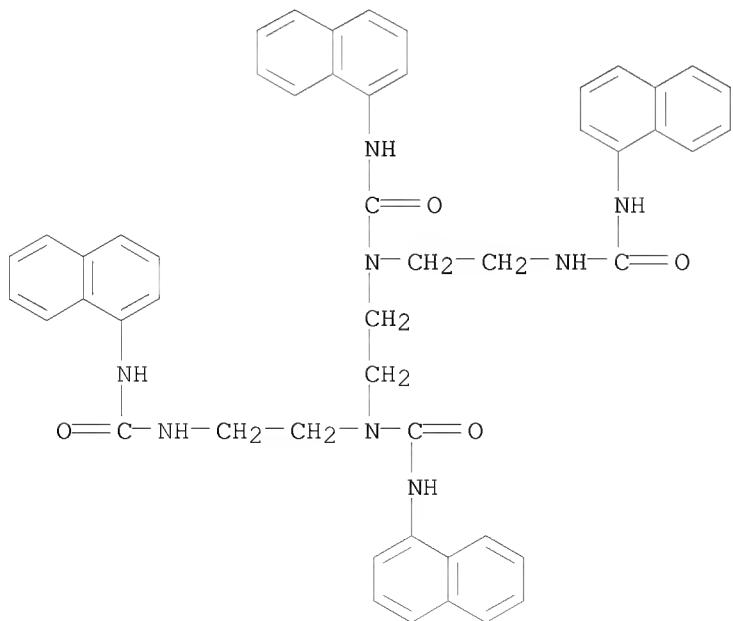


RN 103734-40-3 CAPLUS
CN Urea, 1-[2-(2-pyridyl)ethyl]-1,1'-tetramethylenebis[3-phenyl- (7CI) (CA INDEX NAME)

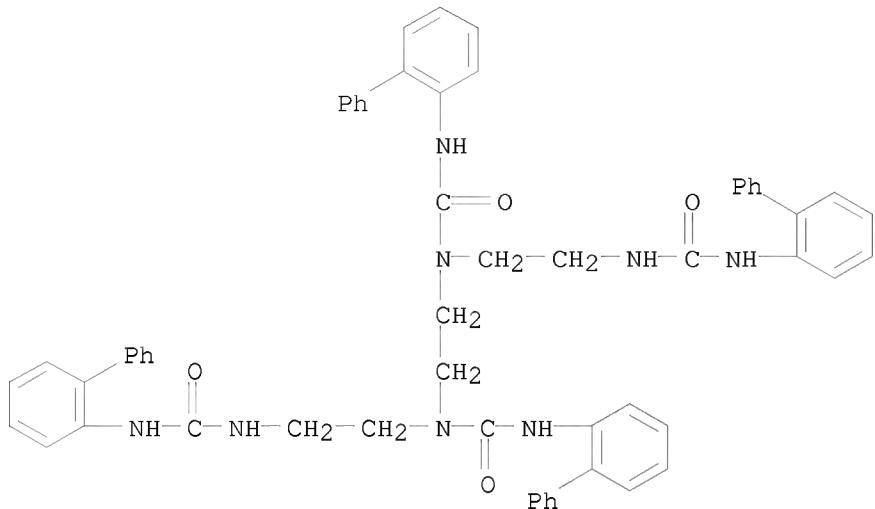


OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

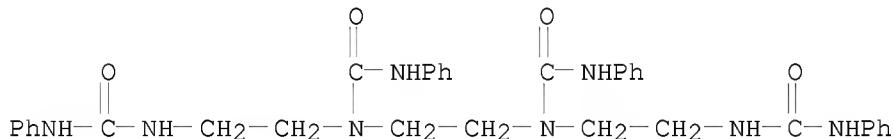
L4 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 1958:92326 CAPLUS
 DN 52:92326
 OREF 52:16185d-e
 TI Reaction of free radicals in solutions. VII. Role of activators in the process of decomposition of triazenes and in initiation of polymerization
 AU Andakuskin, V. Ya.; Dolgoplosk, B. A.; Radchenko, I. I.
 SO Zhurnal Obshchey Khimii (1956), 26, 3789-95
 CODEN: ZOKHA4; ISSN: 0044-460X
 DT Journal
 LA English
 AB See C.A. 51, 9511g.
 IT 108515-69-1P, Urea, 1,1'-ethylenebis[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)ureido]ethyl]- 108992-90-1P, Urea, 1,1'-ethylenebis[3-(2-biphenylyl)-1-[2-[3-(2-biphenylyl)ureido]ethyl]- 122595-05-5P, Urea, 1,1'-ethylenebis[3-phenyl-1-[2-(3-phenylureido)ethyl]-
 RL: PREP (Preparation)
 (preparation of)
 RN 108515-69-1 CAPLUS
 CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-di-1-naphthalenyl-5,8-bis[(1-naphthalenylamino)carbonyl]- (CA INDEX NAME)



RN 108992-90-1 CAPLUS
CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-bis([1,1'-biphenyl]-2-yl)-5,8-bis([1,1'-biphenyl]-2-ylamino)carbonyl- (CA INDEX NAME)



RN 122595-05-5 CAPLUS
CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-diphenyl-5,8-bis[(phenylamino)carbonyl]- (CA INDEX NAME)



L4 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
AN 1958:92325 CAPLUS
DN 52:92325
OREF 52:16185b-d
TI Tetracarbamyl derivatives of 1,2-bis(2-aminoethyl)ethylenediamine
AU Neville, Roy G.
CS Fine Chemicals, Inc., Seattle, WA
SO Journal of Organic Chemistry (1958), 23, 296-7
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA Unavailable
AB $(\text{CH}_2)_2[\text{NH}(\text{CH}_2)_2\text{NH}_2]_2$, (I) was fractionally distilled and the liquid, b20 157°, collected and stored in brown bottles. The following general method for preparing $[\text{CH}_2\text{N}(\text{CONHR})(\text{CH}_2)_2\text{NHCONHR}]_2$ (II) was as follows. The isocyanate (0.04 mole) was added cautiously to 1.46 g. I in 10-20 ml. ice-cold CHCl_3 (strongly exothermic reaction) and the temperature maintained below 30°, on cooling the crystalline derivative filtered off, washed, dried, and recrystd. from iso- PrOH to give II. When 1:2 or 3:4 molar ratios of I and toluene 2,4-diisocyanate or toluene 2,4,6-triisocyanate were used the products were viscous polymers. The following II were thus

prepared (R, % yield, and m.p. given): allyl, 97, 211°; iso-Pr, 96, 245-7° (decomposition); Bu, 98, 216-17°; cyclohexyl, 100, 246-7° (decomposition); Ph, 100, 237-8°; Me(CH₂)₇, 98, 97-8°; dodecyl, 96, 170-1°; octadecyl, 95, 162°; α-C₁₀H₇, 98, 182°; β-C₁₀H₇, 92, 222°. The lower-member products were crystalline whereas the higher- or long-chain derivs. were waxy solids easily soluble in alc.

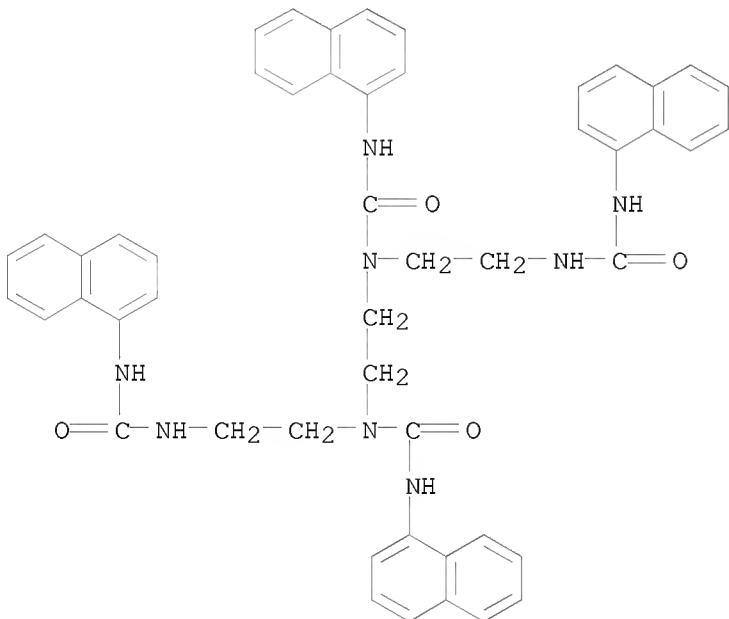
IT 108515-69-1P, Urea, 1,1'-ethylenebis[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)ureido]ethyl]- 108992-90-1P, Urea, 1,1'-ethylenebis[3-(2-biphenyl)-1-[2-[3-(2-biphenyl)ureido]ethyl]- 122595-05-5P, Urea, 1,1'-ethylenebis[3-phenyl-1-[2-(3-phenylureido)ethyl]-

RL: PREP (Preparation)

(preparation of)

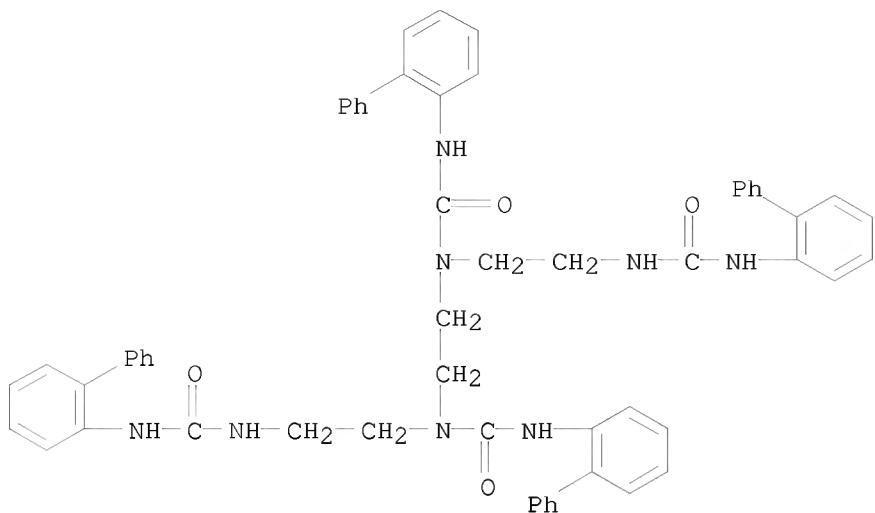
RN 108515-69-1 CAPLUS

CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-di-1-naphthalenyl-5,8-bis[(1-naphthalenylamino)carbonyl]- (CA INDEX NAME)

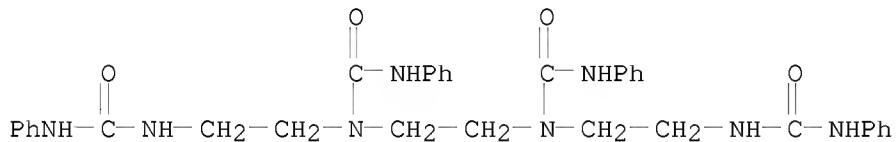


RN 108992-90-1 CAPLUS

CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-bis([1,1'-biphenyl]-2-yl)-5,8-bis([(1,1'-biphenyl)-2-ylamino]carbonyl)- (CA INDEX NAME)



RN 122595-05-5 CAPLUS
 CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-diphenyl-5,8-bis[(phenylamino)carbonyl]- (CA INDEX NAME)



L4 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 1957:62160 CAPLUS
 DN 51:62160
 OREF 51:11268b-i,11269a-i,11270a-f
 TI Preparation and bacteriostatic activity of substituted ureas
 AU Beaver, David J.; Roman, Daniel P.; Stoffel, Paul J.
 CS Monsanto Chem. Co., St. Louis, MO
 SO Journal of the American Chemical Society (1957), 79, 1236-45
 CODEN: JACSAT; ISSN: 0002-7863
 DT Journal
 LA Unavailable
 AB cf. C.A. 49, 924b. The preparation and in vitro bacteriostatic activity of some ureas, carbanilides, and related compds. against *Micrococcus pyrogenes* var. *aureus* are described. The bacteriostatic properties of ureas were remarkably specific in that activity was greatly enhanced or completely lost with slight changes in chemical structure. Activity is drastically reduced by o-substitution regardless of the electronic character of the substituent. Thioureas were invariably less effective than similarly substituted ureas. Bromocarbanilides were less active than the Cl compds. in both ureas and thioureas. Procedure A: PhNCO (11.9 g.) in 50 cc. Et₂O added dropwise to 16.2 g. 3,4-Cl₂C₆H₃NH₂ (I) in 50 cc. Et₂O, the mixture held 2 hrs., and filtered yielded 3,4-dichlorocarbanilide. In the subprocedures the following solvents were used: A2, Skellysolve; A3, C₆H₆; A4, Me₂CO; A5, absolute EtOH; A6, none; A7, none, 4 hrs. at 90°. Procedure B: 3,4-Cl₂C₆H₃NCS (20.4 g.) and 16.2 g. I in 75 cc.

absolute EtOH refluxed 1 hr. yielded 3,3',4,4'-tetrachlorothiocarbanilide. Procedure C: PhNCO (11.9 g.) in 400 cc. Et₂O at 20° treated with anhydrous NH₃ yielded phenylurea. Procedure D: 2-C₁₀H₇NH₂ (60.0 g.) and 24.0 g. urea heated to 160° and held there 3 hrs. yielded 1,3-di-2-naphthylurea. Procedure E: Cyclohexylamine (60.0 g.) in 800 cc. PhMe treated at 100° with COCl₂ yielded 1,3-dicyclohexylurea. For compds. of the type RNHC(:X)NHR', R, X, R', procedure, % yield, and m.p. are: H, O, 2-C₁₀H₇, C, 96.8, 212° (decomposition); H, O, 4-biphenyl, C, 97.0, 209° (decomposition); 1-C₁₀H₇, O, 1-C₁₀H₇, D, 49.8, 295-6°; 2-C₁₀H₇, O, 2-C₁₀H₇, D, 86.7, 305-6°; 2-C₁₀H₇, O, CH₂CH₂CH₂OMe, A, 80.0, 142.5-3.0°; 1-C₁₀H₇, O, cyclohexyl, A, 100.0, 237.0-8.0°; 2-C₁₀H₇, O, dicyclohexyl, A, 99.3, 177.3-7.8°; cyclohexyl, O, cyclohexyl, E, 30.2, 226.0-7.0°; dicyclohexyl, O, Et, A, 87.4, 146.8-7.5°; dicyclohexyl, O, dicyclohexyl, E, 36.5, 81.0-1.7°; cyclohexyl, S, Ph, A₅, 91.5, 150.1-50.9°; cyclohexyl, S, 4-C₆H₄OEt, B, 74.5, 122.2-3.0°; cyclohexyl, S, 4-Me₂NC₆H₄, B, 91.0, 127.0-7.8°; cyclohexyl, S, 1-C₁₀H₇, B, 74.2, 141.8-2.5°; cyclohexyl, S, dicyclohexyl, B, 49.2, 103.2-3.6°; Ph, S, 4-Me₂NC₆H₄, B, 84.2, 154.4-4.8°; Ph, S, 2-C₁₀H₇, B, 83.6, 158.2-9.0°; Ph, S, dicyclohexyl, B, 63.7, 86.5-7.3°; Ph, S, 4-C₆H₄OEt, A₅, 89.8, 133.9-4.3°; 3,4-Br₂C₆H₃, S, 4-BrC₆H₄, A₇, 47.5, 125.0-6.1°. For RC₆H₄NHCONR₁R₂, R, R₁, R₂, procedure, % yield, and m.p. are: H, H, H, C, 61.5, 148.5-9.0°; H, H, CH₂CH₂CH₂NET₂, A₆, 100, 69.5-70.0°; H, H, CH₂CH₂CH₂NHCHMe₂, A₂, 58.0, 143.7-4.2°; H, H, CH₂CH₂CH₂OMe, A₇, 100.0, 87.5-8.2°; H, H, cyclohexyl, A₇, 97.3, 186.3-7.1°; H, H, 2-C₁₀H₇, A₅, 73.3, 233.0-4.0°; H, cyclohexyl, cyclohexyl, A, 79.4, 180.3-1.3°; H, allyl, allyl, A₂, 100.0, 65.5-6.0°; H, PhNHCONHCH₂CH₂CH₂, PhNHCONHCH₂CH₂CH₂, A₆, 100, 132° (decomposition); H, Bu, Bu, A₆, 98.6, 82.7-3.0°; H, heptyl, heptyl, A, 76.0, -; H, 2-ethylhexyl, 2-ethylhexyl, A₇, 93.7, -; H, Ph, Ph, A₇, 86.8, 136.0-6.6°; 2-Me, H, cyclohexyl, A, 95.1, 196.1-6.5°; 2-Me, cyclohexyl, cyclohexyl, A, 86.0, 142.2-2.8°; 4-Me, H, cyclohexyl, A, 100.0, 205.2-5.8°; 4-Me, cyclohexyl, cyclohexyl, A, 91.5, 173.4-3.7°; 2-MeO, cyclohexyl, cyclohexyl, A, 100.0, 155.3-6.0°; 2-EtO, H, CH₂CH₂CH₂OMe, A₆, 78.0, 86.6-7.2°; 2-EtO, H, 2-C₁₀H₇, A, 71.0, 177.5-8.2°; 2-EtO, cyclohexyl, cyclohexyl, A, 65.2, 99.8-100.4°; 4-EtO, H, Et, A, 85.3, 151.9-2.4°; 4-EtO, H, 1-C₁₀H₇, A, 97.6, 238.0-9.0°; 4-EtO, H, 2-C₁₀H₇, A, 99.3, 237.4-8.0°; 4-EtO, H, cyclohexyl, A, 95.6, 182.6-3.0°; 4-EtO, cyclohexyl, cyclohexyl, A, 91.8, 149.6-50.2°; dodecyl, cyclohexyl, cyclohexyl, A₂, 100.0, -; 4-Me₂N, 1-C₁₀H₇, H, A, 96.0, 227.5-8.5°; 4-Me₂N, 2-C₁₀H₇, H, A, 91.3, 252-3°; 2-Ph, H, Et, A, 88.0, 114.6-15.2°; 2-Ph, cyclohexyl, cyclohexyl, A, 100, 110.0-10.7°; 2-Ph, H, CH₂CH₂CH₂NET₂, A₆, 100.0, 76.4-7.0°; 4-Cl, formyl, 2,4-C₁₂C₆H₃, A₇, 85.3, 118.5-19.1°; 4-Cl, formyl, 3,4-C₁₂C₆H₃, A₇, 63.0, 122.5-3.5°; 4-Cl, allyl, 3,4-C₁₂C₆H₃, A₂, 87.2, 151.2-2.0°; 2-MeO, formyl, 2,5-C₁₂C₆H₃, A₇, 71.0, 152.5-3.0°. For compds. of the type RC₆H₄NHCONHC₆H₄R', R, R' (all procedure A except as noted), % yield, and m.p. are: H, 2-MeO, 84.3, 146.2-6.8°; H, 2-EtO, 94.4, 173.8-4.2°; H, 4-EtO, 100.0, 188.2-8.8°; H, 2-Et, 61.2, 184.9-5.5°; H, 4-Me₂N, 94.0, 208.0-8.8°; H, 4-Et₂N, 88.8, 178.7-9.3°; H, 2-Ph, 95.7, 173.0-3.6°; H, 4-Ph, 85.5, 240-1°; H, 4-H₂N, 78.5, above 400°; H, 4-PhNH, 98.2, 212.8-13.8°; H, 4-Cl, 95.0, 250-1°; 2-MeO, 2,4-C₁₂, 99.5, 222.3-3.0°; 4-MeO, 2,4-C₁₂, 58.0, 230.0-30.5°; 2-EtO, 4-EtO, 65.2, 146.4-7.0°; 4-EtO,

2-Me, 84.0, 202.0-2.4°; 4-EtO, 4-Me, 100.0, 220.4-1.0°;
 4-EtO, 4-Me2N, 91.1, 211.8-12.2°; 4-EtO, dodecyl, A2, 100.0, -;
 4-EtO, 2-Ph, 95.8, 194.8-5.4°; 2-Ph, 4-PhNH, 86.8,
 155.8-6.2°; 2-Ph, 2-Ph, 74.0, 182.2-2.8°; 4-Ph, 4-Ph, 76.5,
 312° (decomposition); 4-C1, 4-C1, 98.0, 315-19°; 4-C1, 2,4-C12,
 98.0, 253.0-3.8°; 4-C1, 2,5-C12, 83.0, 261.5-2.5°; 3-C1,
 3,4-Br2, 94.0, 208-5-9.0°; 2,4-C12, 2,4-C12, 97.5, 261-3°.
 For 3,4-C12C6H3NHCONRR', R, R' (all procedure A except as noted), % yield,
 and m.p. are: H, H, C, 93.7, 155.6-6.3°; H, Et, 100.0,
 179.5-80.1°; H, tert-octyl, 100.0, 145.8.6°; H,
 cyclohexyl, 100.0, 188.0-8.7°; H, 1-C10H7, 97.0, 265-6°;
 H, 2-C10H7, 97.2, 267-8°; H, CH2CH(OH)Me, 100, 152.0-2.8°;
 H, CH2CH2CH2OH, 98.8, 126.5-8.0°; H, tetrahydrofurfuryl, 100.0,
 144.1-4.9°; Et, 4-C1C6H4, 77.0, 116.0-6.8°; allyl, allyl,
 A2, 100.0, 62.5-3.5°; allyl, iso-Pr, 93.4, 84.0-4.5°;
 CH2CH2OH, CH2CH2OH, 65.0, 156.8-7.6°; CH2:CC1CH2, CH2:CC1CH2, 100,
 100.7-1.4°; CH2:CC1CH2, iso-Pr, 100, 84.7-5.2; CH2:CC1CH2, tert-Bu,
 100.0, 93.9-5.0°; CHCl:CHCH2, CHCl:CHCH2, 100.0, 156.0-6.6°;
 CH2:CC1CH2, CH2CH2CH2OMe, A2, 100, -; CH2:CC1CH2, Ph, A7, 92.9,
 118.7-9.4°; H, CHCl:CC1CH2, 61.2, 105.1-5.9°; Bu, Ph, 96.5,
 98.5-9.4°; CH2CH2CN, Ph, 89.3, 114.7-15.5°; iso-Pr,
 MeC.tplbond.C, 71.1, 84.4-5.1°; Ph, Ph, 39.5, 148.3-9.1°;
 cyclohexyl, cyclohexyl, 98.0, 177.6-8.4°; cyclohexyl, MeCH:CC1CH2,
 88.7, 160.4-60.8°; allyl, 4-C6H4OEt, 100, -; allyl, 3,4-C12C6H3,
 A2, 87.3, 116.8-17.5°; MeC.tplbond.C, 3,4-C12C6H3, 69.0,
 145.2-6.0°; Bu, Ph, 96.5, 98.5-9.4°; H, 2-thiazolyl, A4,
 99.0, 225° (decomposition). For 3,4-C12C6H3NHCONHC6H4R, R, procedure (A
 unless otherwise noted), % yield, and m.p. are: H, 100, 217.2-7.7°;
 4-Me, 100.0, 258.0-9.0°; 2-MeO, 95.2, 173.8-4.3°; 4-MeO,
 93.5, 233.1-4.0°; 4-Me2N, 95.0, 229.6-30.4°; 4-H2N, A3,
 96.0, above 360°; dodecyl, A7, 98.0, -; 2-Ph, 91.6, 183.3-4.1;
 4-Ph, 84.5, 233.0-4.0°; 2-C1, 87.0, 220.0-20.6°; 3-C1, 91.5,
 210.7-11.3°; 4-C1, 88.0, 255.2-56.2°; 2,4-C12, 97.3,
 238.5-9.2°; 2,5-C12, 94.2, 242.2-2.6°; 3,4-C12, 100.0,
 281-2°; 3,4,5-C13, 100.0, 308-10°; 3-C1-4-HO, 95.4,
 237.4-8.0°; 3,5-C12-4-HO, 92.4, 272-3°; 3-Br, 100.0,
 208.5-9.2°; 4-PhNH, 100, 208.8-9.5°; 4-HO, A3, 82.5,
 213.8-14.5°; 4-NO2, 95.3, 294-5°; 4-sulfamyl, A4, 83.6,
 258.5-9.5°; 4-(2-thiazolesulfamyl), A4, 82.8, 271-2°;
 4-(2-pyrimidinesulfamyl), A4, 79.0, 290° (decomposition). For
 RC6H4NHC:X'R', R, X, R', procedure, % yield, and m.p. are; H, O,
 morpholino, A, 74.5, 159.3-60.0°; H, S, morpholino, B, 72.6,
 132.6-3.4°; H, O, 2-methyl-1-piperidyl, A, 94.5,
 115.4-16.0°; H, O, 1,2-dihydro-2,2,4-trimethyl-1-quinolyl, A,
 71.0, 125.5-6.2°; H, O, 1,2-dihydro-6-ethoxy-2,2,4-trimethyl-1-
 quinolyl, A, 94.2, 146.6-7.0°; H, O,
 1,2-dihydro-6-phenyl-2,2,4-trimethyl-1-quinolyl, A, 40.5,
 148.0-9.1°; 4-MeO, O, morpholino, A2, 95.7, 124.5-5.0°;
 2-C1, O, morpholino, A2, 93.8, 132.2-2.8°; 3-C1, O, morpholino, A2,
 98.3, 129.7-30.3°; 4-C1, O, 4-morpholino, A2, 91.4,
 200.8-1.4°; 3,4-C12, O, morpholino, A, 90.0, 157.1-7.8°;
 3,4-C12, S, morpholino, B, 96.8, 197.5-8.1°; 3,4-C12, O,
 1-piperidyl, A, 100.0, 175.0-5.8°; 3,4-C12, O,
 2-methyl-1-piperidyl, A2, 97.5, 171.4-1.9°; 3,4-C12, O,
 3-methyl-1-piperidyl, A, 56.5, 115.7-6.7°; 3,4-C12, O,
 4-methyl-1-piperidyl, A2, 92.5, 144.0-4.8°; 3,4-C12, O,
 1-pyrrolidyl, A, 97.8, 176.8-7.4°; 3,4-C12, O, 2-pyrrolidon-1-yl,
 A, 89.3, 151.8-2.7°; 3,4-C12, O, 3,4-C12, 2-thiono-1-pyridyl, A4,

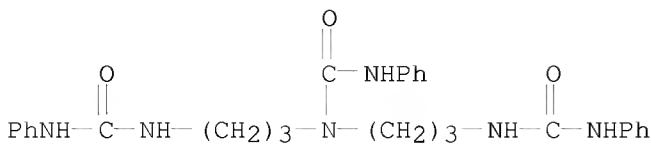
90.5, 171.9-2.8°; 3,4-C12, S, 2-thiono-1-pyrrolidyl, A7, 52.6,
 126.7-7.2°; 3,4-C12, O, 3-methylpyrazin-5-on-1-yl, A4, 62.3,
 228.0-9.0°; 3,4-C12, O, 2,4,6-trimethyl-1-piperidyl, A, 85.5,
 135.3-6.1°; 3,4-C12, O, 1-decahydroquinolyl, A, 99.7,
 160.5-1.4°; 3,4-C12, O, 2-decahydroisoquinolyl, A, 90.4,
 144.0-5.0°; 3,4-C12, O, 1,2-dihydro-6-ethoxy-2,2,4-trimethyl-1-
 quinolyl, A, 54.0, 139.3-40.2°. For 3,4-C12C6H3NHCSNRR', R, R',
 procedure, % yield, and m.p. are: H, CH2CH2CH2OH, A2, 99.0, 34-5°;
 H, 4-ClC6H4, B, 82.0, 154.2-4.9°; H, 3-C1C6H4, B, 75.5,
 119.5-20.5°; H, Ph, B, 99.0, 136.1-7.0°; H, 3-BrC6H6, A7,
 74.6, 107.5-8.3°; H, 3,4-C12C6H3, B, 94.5, 162.6-3.5°; H,
 2-phenyl, A, 99.0, 153.2-4.1°; iso-Pr, allyl, A2, 93.4,
 80.8-1.6°; iso-Pr, MeC.tplbond.C, A2, 88.7, 77.2-7.8°.
 Procedures are given for new compds. 3,4-C12C6H3XC6H4R, for which X, R, %
 yield, and m.p. follow: CONH, 3,4-d-C12, 86.5, 232.6-3.3°; CSNH,
 4-C1, 77.0, 144.5-5.3°; CONH, 4-C1, 80.0, 167.3-8.1°;
 CH2NH, 4-C1, 18.5, 169.0-0.5°; NHCH2, 4-C1, 18.0,
 122.3-3.1°; NHCO, 4-C1, 73.3, 176.6-7.4°; N:CH, 3,4-C12,
 86.5, 132.3-3.0°; N:CH, 4-C1, 81.0, 103.7-4.4°; NHCH2CO,
 4-C1, 80.0, 182.5-3.7°; NHCOCH2CONH, 3,4-C12, 28.7, 227.8-8.6;
 CH:CHCOCH:CH, 3,4-C12, 59.3, 202.1-2.8°; NHCOCONH, 3,4-C12, 27.3,
 228.2-9.1°; NHC(:NH)NH, 3,4-C12, 74.0, 181.1-2.0°;
 NHCOCH:CHCONH, 3,4-C12, 85.0, 227-9°; NHCO2CH2CH2OCONH, 3,4-C12,
 79.3, 217.3-18.0°; NHCONH(CH2)4NHCONH, 3,4-C12, 100.0,
 197.2-8.2°; NHCO2C6H4 CONH-o, 3,4-C12, 71.8, 256-7°;
 NHCONHC6H4NHCONH-p, 3,4-C12, 94.3, above 360°; NHCONHCH2, 3,4-C12,
 90.0, 194.7-5.8°; CH2NHCONH, 4-C1, 88.8, 213.2-13.7°;
 NHCO2C6H4O2CNH-p, 3,4-C12, 84.5, 279-80°; NHSONH, 3,4-C12, 70.6,
 49.5-50.2°; NHCO2CH2CH2SCH2CH2OCONH, 3,4-C12, 87.3,
 141.4-2.5°; CONHCONHCO, 3,4-C12, 70.0, 199.6-200.4°;
 NHCSNHNHCSNH, 3,4-C12, 89.9, 169° (decomposition); NHCONHNHCONH,
 3,4-C12, 88.8, 233-4°; NHCONHNH, H, 97.8, 172.2-3.1°;
 NHCO2(CH2)4OCONH, 3,4-C12, 86.0, 170.9-1.8°; CC13CH:, 3,4-C12,
 74.9, 101.3-2.1°; NHCH:N, 3,4-C12, 73.0, 158.3-9.1°; NHCO2,
 4-C1, 88.8, 149.5-50.7°; NHCO2, 3,4-C1, 91.5, 148.1-9.1°. I
 (162.1 g.) at 75-80° treated dropwise with 60.0 g. MeC.tplbond.CBr,
 the slurry held 3 hrs. at 85°, cooled, neutralized at 20°
 (ice bath) with 30 g. NaOH in 500 cc. H2O, the oil extracted with Et2O, and
 the extract fractionated yielded N-(2-propynyl)-3,4-dichloroaniline, b7
 152.7-3.4°, nD25 1.5991. I treated with CH2:CHCH2C1 and the
 product held 18 hrs. at 80-5° yielded N-allyl-3,4-dichloroaniline,
 b7.5 159.0-61.0, nD25 1.5859. EtOAc (1 l.) saturated with COCl2, treated at
 reflux during 2-3 hrs. with 324 g. I in 1.5 l. EtOAc under a flow of
 COCl2, the solution held 1 hr. at reflux, 1.5 l. EtOAc distilled at atmospheric
 pressure, and the remaining EtOAc removed under a gradually increasing
 vacuum yielded 90.5% 3,4-dichlorophenyl isocyanate, b10.5
 116.7-18.1°, m. 40-1°. H2O (350 cc) containing 58.0 cc. 38% HCl
 treated during 30 min. at 10-15° with 80.0 g. CSCl2, the cooling
 bath removed, 128.0 g. I in 400 cc. PhMe added during 30-60 min., the
 product held 3 hrs. at 85°, filtered, and the PhMe layer separated and
 fractionated yielded 95.1% 3,4-dichlorophenyl isothiocyanate, b7.0
 134.8-5.9°. 3,4-Br2C6H3NH2 by the same method yielded 86.5% crude
 3,4-dibromophenyl isothiocyanate.

IT 121975-58-4, Urea, 1,1'-
 [(phenylcarbamoylimino)bis(trimethylene)]bis[3-phenyl-
 (and its bacteriostatic activity)

RN 121975-58-4 CAPLUS

CN Urea, N'-phenyl-N,bis[3-[(phenylamino)carbonyl]amino]propyl- (CA

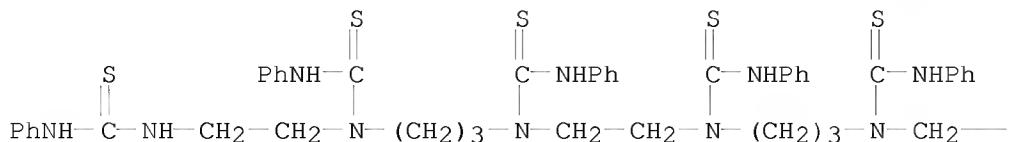
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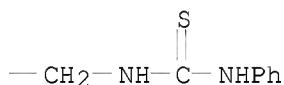
OSC.G 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)

L4 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
AN 1937:33067 CAPLUS
DN 31:33067
OREF 31:4645f-i, 4646a
TI Aliphatic polyamines. IV
AU van Alphen, J.
SO Recueil des Travaux Chimiques des Pays-Bas et de la Belgique (1937), 56,
343-50
CODEN: RTCPB4; ISSN: 0370-7539
DT Journal
LA Unavailable
AB cf. C. A. 31, 1007.3. $(\text{CH}_2)_3\text{Br}_2$ (240 g.), 360 g. of $(\text{CH}_2)_2(\text{NH}_2)_2 \cdot \text{H}_2\text{O}$ and
250 cc. absolute EtOH give 67 g. of 1,3-bis(2'-aminoethylamino)propane (I),
b12 157°, 36 g. of II and 13 g. of III. II is
triethylenebis(trimethylene)hexamine, b14 252°; it is a strong base
and gives the same precipitation and color reactions as I; it gives a reddish
violet biuret reaction with a small amount of Cu salt; HCl salt, with 2
mols. H2O, m. 275°; H oxalate, $\text{C}_{12}\text{H}_{32}\text{N}_6 \cdot 6\text{C}_2\text{H}_2\text{O}_4$, amorphous, m.
235°; picrate, yellow, m. 220°; the condensation product
with PhNCS, 1,16-bis(2'-phenylthioureido)
-3,7,10,14-tetraphenylthiocarbamido-3,7,10,14-tetraazahexadecane, $\text{PhNHCSNH}[\text{CH}_2\text{CH}_2\text{N}(\text{CSNHPH})\text{CH}_2\text{CH}_2\text{CH}_2\text{N}(\text{CSNHPH})]_2\text{CH}_2\text{CH}_2\text{NHCSNHPH}$, amorphous, m.
135-40°; II and CS2 in EtOH give a yellow, amorphous precipitate; heating
at 190-200° splits off H2S and gives 1,3-bis[3' -
(2'-thiotetrahydroimidazolyl - 1'') - propyl] - 2 - thiotetrahydro -
imidazole, m. 166-7°. Reaction of II with BzH and reduction with
Na in absolute EtOH gives 1,20-diphenyl-2,5,9,12,16,19-hexaazaicosane, with 2
mols. H2O, m. 54°; the HCl salt, $\text{C}_{26}\text{H}_{44}\text{N}_6 \cdot 6\text{HCl}$, m. above
300° (decomposition); nitrate, m. 211°; picrate, yellow, m.
211°; the HCl salt and NaNO2 give the hexa-NO derivative, m.
86°. III, b14 316°, is a mixture containing
1,4,8,11-tetraazacyclotetradecane; this also is formed from I and
 $(\text{CH}_2)_3\text{Br}_2$; HCl salt, $\text{C}_{10}\text{H}_{24}\text{N}_4 \cdot 4\text{HCl} \cdot \text{H}_2\text{O}$; nitrate, m. 205°
(decomposition); picrate, decomp. 210°; H oxalate, decomp.
221°; with BzH on reduction there results a small quantity of 1,27
- diphenyl - 2,5,9,12,16,19,23,26-octaazaheptacosane, whose HCl salt,
 $\text{C}_{31}\text{H}_{56}\text{N}_8 \cdot 8\text{HCl}$, m. above 300°; this indicates that
1,23-diamino-3,7,10,14,17,21-hexaazatricosane is present in III. Other
fractions, b1, 244° and b1 275°, are amines of the type
 $(\text{CH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{CH}_2)_n$.
IT 854247-55-5P, Ethylenediamine,
 $\text{N},\text{N}'\text{-bis}[3\text{-[3-phenyl-1-[2-(3-phenyl-2-thioureido)ethyl]-2-}$
 $\text{thioureido]propyl-N,N'-bis(phenylthiocarbamyl)-}$
RL: PREP (Preparation)
(preparation of)
RN 854247-55-5 CAPLUS

PAGE 1-A



PAGE 1-B



OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L4 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 1937:7774 CAPLUS
 DN 31:7774
 OREF 31:1007b-g
 TI Aliphatic polyamines. III
 AU van Alphen, J.
 SO Recueil des Travaux Chimiques des Pays-Bas et de la Belgique (1936), 55,
 835-40
 CODEN: RTCPB4; ISSN: 0370-7539
 DT Journal
 LA Unavailable
 AB cf. C. A. 30, 7100.4. 1,3-Bis[(2'-aminoethyl)amino]-propane (I), b.
 286-7°, b35 185-6°, was prepared along with another amine, b35
 274-6°, by adding slowly 150 g. of $\text{CH}_2(\text{CH}_2\text{Br})_2$ in 250 cc. of absolute
 alc. to 250 g. of 1,2-diaminoethane hydrate. The mixture was warmed for 1
 hr., 200 g. KOH added, warmed 0.5 hr., filtered, distilled, the residue
 cooled, separated from solid KOH, and redistd. in vacuo. I forms a
 tripicrate, m. 171°, by adding a solution of picric acid to a solution of
 the amine, and a tetrapicrate, m. 223° (indefinite), by the reverse
 procedure or by heating the tripicrate with picric acid. Its tetraoxalate
 m. 237°. I in H₂O is basic, gives a white precipitate with Nessler's
 reagent, phosphotungstic acid, reduces Ag salts and KMnO₄ but not Fehling
 solution, reacts with Br water and with I₂ in KI solution, gives a reddish
 violet color with a Cu salt and a rose-red with a Ni salt. The following
 derivs. of I have been prepared: 1,3-bis{3'-phenyl-1'-(2'-(3''-
 phenylureido)ethyl]ureido}propane, m. 145-55°, by mixing with PhNCO
 in ether solution; 1,3-bis{3'-phenyl-1'-(2'-(3''-
 phenylthioureido)ethyl]thioureido}propane, m. 179°, with PhNCS;
 1,3-bis{[2'-(benzoylamino)ethyl]-benzoylamino}propane, m. 172°, by
 the Schotten-Baumann method; 1,3-bis(2'-thiotetrahydroimidazolyl-1'-
)propane, m. 156°, by heating at 140° the precipitate formed with
 CS₂ in alc.; 1,3-bis-{[2'-(benzylamino)ethyl]amino}propane (II), from the
 reaction of I with 3 mols. of BzH, the product dissolved in absolute EtOH, 6
 atoms Na added, the HCl salt precipitated with HCl (m. 270-90°)

(decomposition)), and the free base obtained as an oil by treating with strong NaOH. The oil solidifies and crystallizes from H₂O with 1 H₂O, m. 44°; tetrapicrate, m. 201°; tetraoxalate, m. 247°.

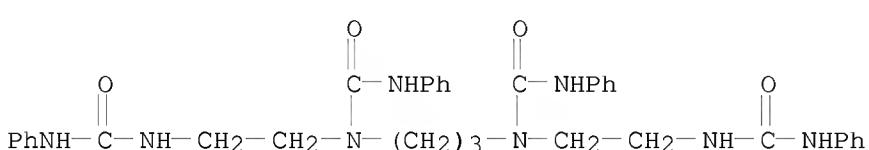
II forms the following derivs.: 1,3-bis{

[2'-(benzyl-nitrosoamino)ethyl]nitrosoaminolpropane, m. 99°, with NaNO₂ and HCl in H₂O; 1,3-bis{3'-phenyl-1-[2''-(1'''-benzyl-3'''-phenylthioureido)ethyl]thioureido}propane, m. 130-5°, with PhNCS in alc.; 1,3-bis(2'-phenyl-3'-bensyltetrahydroimidazolyl-1')propane, m. 123°, with 1 mol. BzH, the mixture dissolved in ether and dried over anhydrous Na₂SO₄ and evaporated; 1,3-bis[2'-(p-methoxyphenyl)-3'-benzyltetrahydroimidazolyl-1']propane m. 110°, with anisaldehyde as above.

IT 854657-59-3P, Urea, 1,1'-trimethylenebis[3-phenyl-1-[2-(3-phenylureido)ethyl]-854657-61-7P, Urea,
1,1'-trimethylenebis[3-phenyl-1-[2-(3-phenyl-2-thioureido)ethyl]-2-thio-
RL: PREP (Preparation)

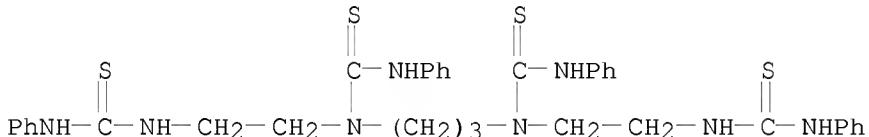
(preparation of)

RN 854657-59-3 CAPLUS
CN 2,5,9,12-Tetraazatridecanediamide,



RN 854657-61-7 CAPLUS

CN 2,5,9,12-Tetraazatridecanedithioamide,
N1,N13-diphenyl-5,9-bis[(phenylamino)thioxomethyl]- (CA INDEX NAME)



OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L4 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
AN 1936:45195 CAPLUS
DN 30:45195
OREF 30:5992h-i,5993a-e
TI Aliphatic polyamines. I
AU van Alphen, J.
SO Recueil des Travaux Chimiques des Pays-Bas et de la Belgique (1936), 55,
412-18
CODEN: RTCPB4; ISSN: 0370-7539
DT Journal
LA English
AB 1,2-Bis(aminoethylamino)ethane (I), the triethylenetetramine of Hofmann
(Ber. 3, 762(1870); 4, 666(1871); 23, 3297, 3711(1890)) is prepared in good
yield as follows: pour 150 g. (CH₂Br)₂ in 125 cc. absolute EtOH slowly into
250 g. of 1,2-diaminoethane hydrate in 125 cc. absolute alc., reflux 1 hr.,

add 250 g. solid KOH and continue heating 10 min., stand overnight, filter, distil at atmospheric pressure to 130°, cool. Distil the upper layer in vacuo. Two fractions are obtained: I, b31 174°, and 1-(aminoethylaminoethyl)-piperazine or tetraethylenetetramine (II), b31 266-70°. I loses its 0.5 mol. H₂O when distilled at ordinary pressure and b. 272°. It is characterized by its tetra-Bz derivative m. 236° (from alc.). I yields the following derivs.: 1,2 - bis{3' - phenyl - 1' - [2'' - (3''' - phenylureido)-ethyl]ureido}ethane, m. 237°, by adding PhNCO in ether and recrystg. the precipitate from EtOH; 1,2-bis-{3'-phenyl-1'-[2''-(3'''-phenylthioureido)ethyl]thioureido}ethane, m. 206°, by mixing with PhNCS in absolute alc. and purifying the insol. precipitate by extracting with boiling alc.; 1,3-bis(2''-benzylidene-aminoethyl)-2-phenyltetrahydroimidazole, m. 86° (immediately decomposed by dilute HCl), from 14.6 g. I and 31.8 g. BzH; 1,2-bis{[(2''',4'''-dinitrophenyl) { (2'',4''-dinitrophenylamino) ethyl} amino}-ethane (III), m. 285°, by boiling 6.7 g. I, 5 g. 1-bromo-2,5-dinitrobenzene, 5 g. NaOAc and 20 cc. EtOH for 1 hr., extracting the amorphous precipitate with H₂O and boiling alc., dissolving in hot Me₂CO (from which it suddenly pts. as crystals and is then insol.), and recrystg. from boiling PhNO₂; 1,2-bis(3'-thiotetrahydroimidazole-1')-ethane, m. 265° (recrystd. from H₂O), by mixing alc. I with alc. CS₂ and heating the precipitate of yellow thiocarbamate which loses H₂S at 120-40°; 1,2 - bis{[(2''',4''',6''' - trinitrophenyl){(2'',4''6''-trinitrophenylnitramino)ethyl}]amino}-ethane, which decomposes at 165° and explodes when heated suddenly, was prepared from 0.5 g. III and 5 cc. HNO₃ cooled to - 15°, and precipitated by adding ice water slowly. II, a strong base, is a pale yellow viscous liquid with tobacco-like smell, miscible with H₂O and EtOH but not with Et₂O. Its formula is proved by the formation of the following compds.: tetra-picrate, m. 212°, tetra-oxalate, m. 289°, tri-Bz derivative: 4-benzoyl-1-[2'-(benzoyl)(2''-benzoylaminoethyl)-amino]ethyl-piperazine, prepared by the Schotten-Baumann method but could not be crystallized; its di-picrate, m. 221°; 4 - phenylthiocarbamido - 1 - {2' - [{phenylthiocarbamido-[2'' - (3''' - phenylthioureido) ethyl]amino}ethyl]piperazine, m. 132-40° (decomposition) from the reaction of alc. II with alc. PhNCS and repeatedly extracted with boiling alc.; and the mono-Bz derivative, 1-(benzylaminoethylaminoethyl)-piperazine-H₂O, m. 50° (recrystd. from H₂O), prepared by mixing 1 mol. of II with 2 mols. BzH, dissolving in absolute EtOH, adding 4 atoms Na, precipitating with strong HCl

and

treating with H₂O and NaOH; its tetra picrate, m. 212° (decomposition).

IT 88936-58-7P, Urea, α,α' -ethylenabis[β -phenyl-

α -[β -(β -phenylthiocarbamido)ethyl]thio-

122595-05-5P, Urea, α,α' -ethylenabis[β -phenyl-

α -[β -(β -phenylcarbamido)ethyl]- 858833-83-7P,

1-Piperazinecarboxanilide, 4-[β -[β -phenyl- α -[β -(β -phenylthiocarbamido)ethyl]thiocarbamido]ethyl]thio-

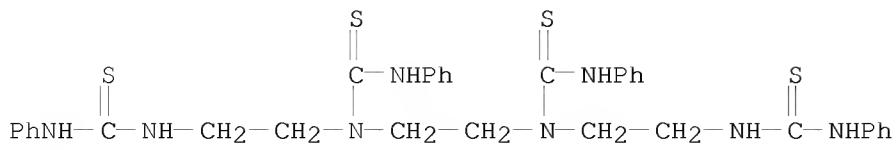
RL: PREP (Preparation)

(preparation of)

RN 88936-58-7 CAPLUS

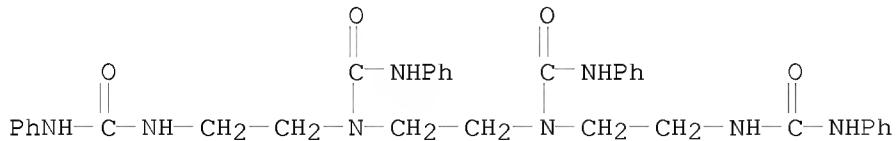
CN 2,5,8,11-Tetraazadodecanedithioamide,

N1,N12-diphenyl-5,8-bis[(phenylamino)thioxomethyl]- (CA INDEX NAME)



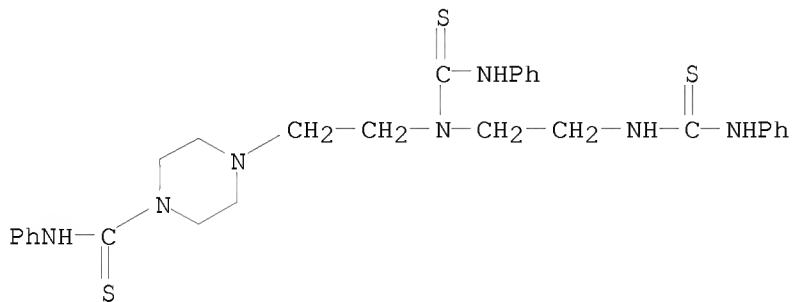
RN 122595-05-5 CAPLUS

CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-diphenyl-5,8-bis[(phenylamino)carbonyl]- (CA INDEX NAME)



RN 858833-83-7 CAPLUS

CN 1-Piperazinecarbothioamide, N-phenyl-4-[2-[(phenylamino)thioxomethyl][2-[(phenylamino)thioxomethyl]amino]ethyl]amino]ethyl- (CA INDEX NAME)



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)